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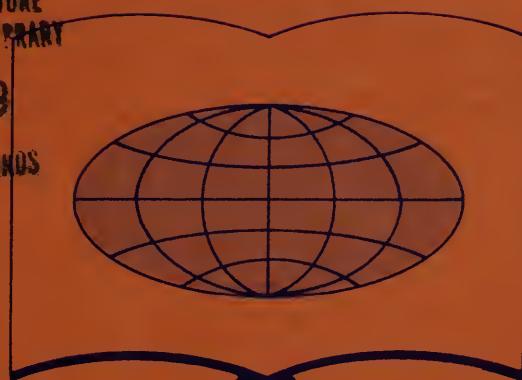
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# Pesticides DOCUMENTATION BULLETIN

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Volume 5  
June 20, 1969

Number 13



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U.S. DEPARTMENT OF AGRICULTURE

# PESTICIDES DOCUMENTATION BULLETIN

A Bi-Weekly Publication of U.S. Department of Agriculture

Volume 5  
June 20, 1969  
Number 13

## OBJECTIVES AND SCOPE

The *Pesticides Documentation Bulletin* is compiled by the National Agricultural Library's Pesticides Information Center to facilitate national research efforts in all aspects of pest control. This bi-weekly index to the literature includes coverage of diseases, insects, nematodes, parasites, weeds and other pests affecting plants, animals, man, our natural resources and other values in man's environment. Special emphasis is given to the literature on toxicological, physiological and epidemiological aspects of pests and their control by chemical biological and integrated methods.

For broader coverage of literature on agriculture and related subjects, please consult the *Bibliography of Agriculture*, a monthly publication of the National Agricultural Library.

## FORMAT

The *Bulletin* is a categorized bibliography, with citations arranged alphabetically by author under the following major subjects:

- 10 Entomology
- 20 Crop Protection
- 30 Livestock Protection
- 40 Commodity Protection
- 50 Environmental Contamination
- 55 Residues
- 60 Toxicology
- 65 Plant Physiology & Biochemistry
- 70 Chemistry
- 80 Engineering
- 90 Industry

*Citations:* Each citation consists of an accession number assigned serially with the last two digits representing the Bulletin's issue year, i.e. 3286-67. The citation number (minus the year) is used in all indices. Following the accession number is the full title of the article; all personal authors; an abbreviated journal title; volume, issue and inclusive page numbers; date of publication; language abbreviation, if other than English; and the National Agricultural Library's call number. Subject descriptors, patent or grant numbers, bibliographer's notes, and abstracts or extracts may follow each citation when appropriate.

*Subject Index:* Subject descriptors appear in the index followed by title arranged numerically by accession number. The Agricultural/Biological Vocabulary developed by the National Agricultural Library is used as a basic thesaurus of descriptors.

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The INTREDIS Register is a computer data bank in the field of forest pathology. It contains title and author references to abstracted articles including subject, country, host plant genus or species, organisms causing the diseases, abstracting journal and year of publication. The computer search uses boolean parameters in any combination of elements listed.

The Herbicides Data File consists of reports on field tests conducted by the Crops Protection Research Branch, Crop Research Division, Agriculture Research Service. Each test record contains the following items of information:

- Compound Tested
- Company furnishing the compound
- Author or Investigator
- Test Sponsor
- Date
- Location
- Mode of Application
- Rates of Application
- Soil Types
- Carriers
- Crops or Weeds tested with phytotoxicity ratings
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## ACKNOWLEDGMENT

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Use of funds for printing this publication approved by the Director of the Bureau of the Budget (May 23, 1968).

**PLEASE GIVE COMPLETE BIBLIOGRAPHIC INFORMATION AS IT APPEARS IN THIS PUBLICATION FOR EACH ITEM REQUESTED.**

This publication reports research involving pesticides. It does not contain recommendations for their use, nor does it imply that the uses discussed here have been registered. All uses of pesticides must be registered by appropriate State and/or Federal agencies before they can be recommended.

**CAUTION:** Pesticides can be injurious to humans, domestic animals, desirable plants, and fish or other wildlife—if they are not handled or applied properly. Use all pesticides selectively and carefully. Follow recommended practices for the disposal of surplus pesticides and pesticide containers.

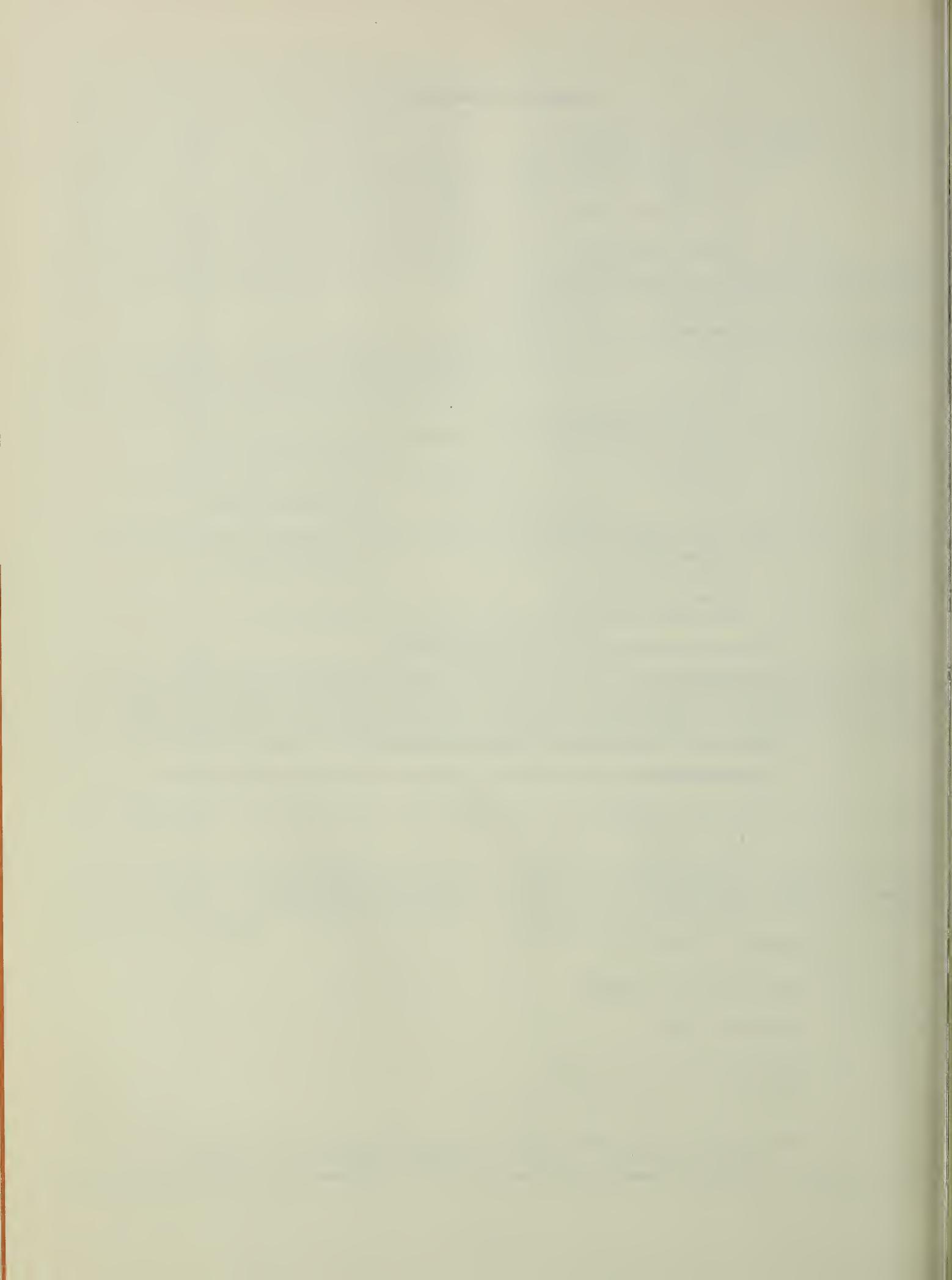
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Insect taxonomy, Sphingidae, Surveys, Zoogeography.

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THE PRIMARY TYPES OF THE AUSTRALIAN PYRGOMORPHIDAE (ORTHOPTERA: ACridoidea). (0)  
K H L Key  
*Australian J Zool* 17(2):353-414 REF  
Jun 1969 410 AU73  
Insect taxonomy, Orthoptera, Pyrgomorphidae.

7488-69  
THE COPULATORY COMPLEX OF SOME SPECIES OF TRAMEA HAGEN (LIBELLULIDAE: ODONTA) AND ITS TAXONOMIC IMPORTANCE.  
B A Khan  
*Zool Anz* 181(5-6, NOV-DEC):403-410  
Dec 1968 410 Z7  
Insect taxonomy, Odonata, Reproductive organs.

7489-69  
ON SEVERAL AUSTRALIAN NOTODONTIDAE (LEPIDOPTERA: NOTODOONTOIDEA). (FR)  
S G Kiriakoff  
*Natur Can* 95(3, MAY-JUN):667-672  
Jun 1968 410 N216  
Insect taxonomy, Notodontidae. English abstract.

7490-69  
CONTRIBUTION TO THE REVISION OF THE GENUS ORTHOSTIGMA (HYMENOPTERA, BRACONIDAE). (GE)  
E Konigsman  
*Deut Entomol Z* 16(1-3):1-53 REF  
01 May 1969 421 D48  
Braconidae, Insect identification, Insect taxonomy.

7491-69  
RESULTS OF THE ALBANIAN 1961 EXPEDITION OF THE GERMAN ENTOMOLOGICAL INSTITUTE. 62. CONTRIBUTION. BIBLIOGRAPHY OF THE ENTOMOLOGICAL INVESTIGATION OF ALBANIA. PART II. (GE)  
E Konigsman  
*Beitr Entomol* 17(3-4):435-457  
1967 421 B392  
Bibliography, Insect taxonomy, Surveys. English and Russian abstracts.

7492-69  
A FIFTH SPECIES OF NITELA FROM NORTH AMERICA (HYMENOPTERA: SPHECIDAE).  
K V Krombein  
*Natur Can* 95(3, MAY-JUN):699-702  
Jun 1968 410 N216  
Insect taxonomy, Sphecidae, Zoogeography.

7493-69  
CHIRONOMIDAE (DIPTERA) FROM THE HULA NATURE PRESERVE, ISRAEL.  
J Kugler D Wool  
*Ann Zool Fenn* 5(1):76-83 MAP REF  
1968 410 AN712  
Chironomidae, Seasonal variation, Zoogeography.

7494-69  
NEW SYNONYMIES IN THE GENUS PROMECOPS SAHLBERG (COLEOPTERA CURCULIONIDAE).  
G Kuschel  
*New Zealand J Sci* 10(3):841-842  
Sep 1967 514 N482  
Curculionidae, Insect names, Insect taxonomy.

7495-69  
ZYRUS FROM TANZANIA (EAST AFRICA) WITH DESCRIPTION OF A NEW SPECIES. MATERIAL OF THE ZOOLOGICAL COLLECTION OF THE BAVARIAN STATES, MUNICH (COLEOPTERA STAPHYLINIDAE).  
H R Last  
*Opusc Zool* (104):2P  
15 Dec 1968 410 OP7  
Insect taxonomy, Staphylinidae, Zoogeography.

7496-69  
A METHOD OF SELECTION OF CHARACTERS IN NUMERICAL TAXONOMY.  
W J Le Quesne  
*Syst Zool* 18(2):201-205  
Jun 1969 410 SY8  
Insect evolution, Insect taxonomy, Methodology, Statistical analysis.  
A method of selecting from a data matrix the characters most likely to lead to valid phylogenetic conclusions is put forward, based on the concept of a uniquely derived character and its logical consequences. A coefficient of character-state randomness is defined which gives a measure of how far the distribution of character-states is random between the different characters.

7497-69  
POSITIVE PHOTOTAXIS OF CHIRONOMIDAE LARVULAE AS A FACTOR REGULATING THEIR DISTRIBUTION IN STagnANT BODIES OF WATER. (GE)  
J Lellak  
*Ann Zool Fenn* 5(1):84-87 REF  
1968 410 AN712  
Chironomidae, Insect ecology, Insect taxonomy, Larvae, Phototropism, Plankton, Water.

7498-69  
A REVIEW OF OLD WORLD SPECIES OF THYREUS PANZER (OCROCISA JURINE) (HYM., APOIDEA, ANTHOPHORIDAE). PART 4. PALEARCTIC SPECIES.  
M A Lieftinck  
*Leiden Rijksmus Natuur Hist Zool Verhandel* (98):3-139  
20 Dec 1968 410.9 L59Z  
Anthophorinae, Insect taxonomy, Reviews, Thyreus.

7499-69  
TWO NEW ODONATA FROM SOUTHEAST ASIA, WITH COMMENTS ON PREVIOUSLY DESCRIBED SPECIES.  
M A Lieftinck  
*Deut Entomol Z* 16(1-3):205-215  
01 May 1969 421 D48  
Insect taxonomy, Odonata, Surveys.

7500-69  
SAWFLY STUDIES (HYMENOPTERA, SYMPHYTA). (GER)  
E Lindqvist  
*Notulae Entomol* 49(1):38-48 REFS  
1969 421 N84  
Insect taxonomy, Symphyta, Zoogeography.

7501-69  
NEW AND LITTLE KNOWN PALEARCTIC SPECIES OF THE SCAPHOSOMA LEACH GENUS (COL., SCHPHIDIIDAE) (18. CONTRIBUTION TO THE KNOWLEDGE OF THE SCHPHIDIIDAE). (GE)  
I Lobl  
*Acta Ent Bohemoslov* 64(2):105-111  
1967 420 C33

# ENTOMOLOGY

7502-69

Insect taxonomy, Scaphidiidae, Scaphosoma, Zoogeography. Czech abstract.

7502-69

RESULTS OF THE ALBANIAN 1961 EXPEDITION OF THE GERMAN ENTOMOLOGICAL INSTITUTE. 63. CONTRIBUTION. DIPTERA: LIMONIIDAE. (GE)

B Mannheims

*Beitr Entomol* 17(3-4):459-476

1967 421 B392

Insect taxonomy, Limoniidae, Surveys. English and Russian abstracts.

7503-69

MITES OF THE FAMILIES TENUIPALPIDAE AND TETRANYCHIDAE INTERCEPTED ENTERING NEW ZEALAND FROM OVERSEAS.

D C M Manson

*New Zealand J Sci* 10(3):664-674

Sep 1967 514 N482

Economics, Surveys, Tenuipalpidae, Tetranychidae, Zoogeography.

The species of mites and the hosts from which they have been recorded are given for the years 1958-66. The known host range, distribution, and economic importance of most species is also stated. One new species, *Eotetranychus queenslandicus*, is described.

7504-69

THE SPIDER MITE FAMILY TETRANYCHIDAE IN NEW ZEALAND. IV. TWO NEW SPECIES OF TETRANYCHUS AND A REVISED KEY TO THE GENUS.

D C M Manson

*New Zealand J Sci* 10(4):1083-1091

Dec 1967 514 N482

Insect taxonomy, Tetranychus.

Two new species of mites, *Tetranychus elsae* and *T. eyrewellensis* are described and figured. A key to all the species known from New Zealand is included.

7505-69

THREE SPECIES OF THE FAMILY NOCTUIDAE NEW FOR THE CSSR (LEPIDOPTERA). (CZ)

J Marek J Stary

*Acta Ent Bohemoslov* 64(3):238-239 REF

1967 420 C33

Insect taxonomy, Noctuidae. English and German abstracts.

7506-69

IMMATURE STAGES OF CURCULIONIDAE. I. SOME GENERA IN THE TRIBE ARAUCARIINI (COSSONINAE).

B M May

*New Zealand J Sci* 10(3):644-660

Sep 1967 514 N482

Curculionidae, Insect biology, Insect taxonomy, Larvae, Pupae.

The larvae of five species of weevils involving the genera Araucarius Kuschel, Xenocnema Wollaston and Inosdmus Brown in the cossoneine tribe Araucariini are described and a key is given for their separation. The pupae of two Araucarius species and of Xenocnema are described. Tribal characters are tentatively defined. The taxonomic significance of the morphology of the alimentary canal is discussed. The tribe Araucariini is considered, on larval characters, to occupy a position intermediate between Scolytinae and Curculioninae.

7507-69

CONIOPTERYGIDAE FROM MONGOLIA (NEUROPTERA).

M Meinander

*Notulae Entomol* 49(1):7-10

1969 421 N84

Coniopterygidae, Insect taxonomy, Palearctic Region.

7508-69

PLECOPTERA FROM THE HAMBURG VICINITY (INSECTA-PLECOPTERA) (A CONTRIBUTU-

# BIBLIOGRAPHY

TION TO THE KNOWLEDGE OF THE PLECOPTERA FAUNA OF THE NORTH GERMAN LOWLANDS. (GE)

H Mendl

*Hamburg Zool Staatsinst Zool Mus Entomol Mitt* 3(65):1-10 REF

30 Apr 1969 421 H17

Insect taxonomy, Plecoptera, Surveys.

7509-69

EPILACHNA NIPONICA LEWIS. ON THE TYPE-SPECIMENS OF EPILACHNA NIPONICA LEWIS. (JA)

C Michio

*Mikado Misc Entomol* 1(7):51-58

03 Mar 1968 421 M582

Epilachna, Insect taxonomy, Zoogeography.

7510-69

DIPTERA COLLECTIONS OF P. GABRIEL STROBL--I. (PREFACE AND SPECIMENS PART I UP TO 1890). (GE)

G Morge

*Beitr Entomol* 17(1-2):151-224

1967 421 B392

Diptera, Insect taxonomy, English and Russian abstracts.

7511-69

DESCRIPTIONS OF MALES OF HAEMATOPOTA SCUTELLATA INCLUDING DESCRIPTIONS OF THE HAEMATOPOTA MEIG. GENUS IN CZECHOSLOVAKIA (DIPTERA, TABANIDAE). (GE)

J Moucha M Chvala

*Acta Ent Bohemoslov* 64(3):224-231 REF

1967 420 C33

Haematopota, Haematopota scutellata, Insect morphology, Insect taxonomy, Zoogeography, Czech abstract.

7512-69

SIBLING SPECIES OF PHYTOSEIIDAE (ACARINA: MESOSTIGMATA).

M H Muma H A Denmark

*Fla Entomol* 52(2):67-72

May 1969 420 F662

Insect ecology, Insect taxonomy, Phytoseiidae.

7513-69

A NEW TAXON OF THE FAMILY HETEROGYNIDAE LATREILLE (HYM., ACULEATA).

C G Nagy

*Hamburg Zool Staatsinst Zool Mus Entomol Mitt* 3(64):7-11 REF

30 Apr 1969 421 H17

Aculeata, Insect taxonomy.

7514-69

THE NEW POLPOCHILA OF MEXICO AND BOLIVIA (INSECTA, COLEOPTERA, CARABIDAE). (SP)

I Negre

*Ciencia* 25(3):91-94

15 Jan 1967 475 C48

Carabidae, Insect taxonomy, French abstract.

7515-69

SUGGESTIONS CONCERNING THE TERMINOLOGY OF THE GENITAL SHEATH OF THE LEPIDOPTERA. (FR)

E V Niculescu

*Deut Entomol Z* 16(1-3):153-158 REF

01 May 1969 421 D48

Insect morphology, Insect taxonomy, Lepidoptera, Nomenclature, Reproductive organs.

7516-69

RESULTS OF THE ALBANIAN 1961 EXPEDITION OF THE GERMAN ENTOMOLOGICAL INSTITUTE. 66. CONTRIBUTION. HYMENOPTERA: TIPHIIDAE. (GE)

J Oehlke

*Beitr Entomol* 17(3-4):517-524

1967 421 B392

Insect taxonomy, Surveys, Tiphidae. English and Russian abstracts.

7517-69

TABANUS SPODOPTEROIDES SP. N., A NEW HORSEFLY SPECIES FROM THE TABANUS BOVINUS GROUP. (GE)

N G Olsuf'ev J Moucha M Chvala

*Angew Parasitol* 10(1):37-39

Feb 1969 436.8 AN4

Insect taxonomy, Tabanus. English and Russian abstracts.

7518-69

A KEY TO THE ORTHOPTERAN LARVAE OF CENTRAL GERMANY. (GE)

N Oschmann

*Deut Entomol Z* 16(1-3):277-291 REF

01 May 1969 421 D48

Insect taxonomy, Larvae, Orthoptera.

7519-69

NEW CONTRIBUTIONS TO THE KNOWLEDGE OF THE APERTYGOTA COLLECTION OF THE STATE ZOOLOGICAL INSTITUTE AND THE ZOOLOGICAL MUSEUM OF HAMBURG. III. MEINERTELLIDAE AND MACHILIDAE (THYSANURA). (GE)

J Paclt

*Hamburg Zool Mus Inst Mitt* 3(63):1-24

30 Jan 1969 410.9 H172

Insect taxonomy, Machilidae, Thysanura.

7520-69

STUDIES ON MEMBRACIDAE. IX. A NEW COSTA RICAN SPECIES OF THE GENUS SPHONGOPHORUS FAIRMAIRE (HEMIPTERA:HEMIPTERA:THYSANOPTERA). (SP)

D Pelaez

*Ciencia* 25(6):209-212 REF

15 Oct 1967 475 C48

Insect taxonomy, Membracidae. English abstract.

7521-69

A NEW SPECIES OF CERCOTHRIPS HOOD FROM MADAGASCAR (THYSANOPTERA).

J Pelikan

*Acta Ent Bohemoslov* 64(5):364-370

1967 420 C33

Cercothrips priesneri, Insect taxonomy.

7522-69

THIRD CONTRIBUTION TO THE KNOWLEDGE OF THE GEOGRAPHICAL DISTRIBUTION OF THE TINEIDS ON THE IBERIAN PENINSULA (LEPIDOPTERA:TINEIDAE). (GE)

G Petersen

*Beitr Entomol* 17(3-4):357-361

1967 421 B392

Insect taxonomy, Tineidae, Zoogeography. English and Russian abstracts.

7523-69

THE IDENTITY OF ANTHOMYIA MELANIA DUFOUR, 1839 (DIPTERA: FANNIIDAE).

A C Pont

*Beitr Entomol* 17(3-4):325-328

1967 421 B392

Fannia ciliata, Insect taxonomy, Muscidae, Nomenclature.

7524-69

NOTES ON THE MUSCIDAЕ OF NEW GUINEA (DIPTERA). III. SPECIES DESCRIBED BY STEIN IN 1900, TERMESZTR. FUZ., VOLUME 23.

A C Pont

*Deut Entomol Z* 16(1-3):81-90 REF

01 May 1969 421 D48

Insect taxonomy, Muscidae, Surveys, Zoogeography.

7525-69

THE GEOGRAPHICAL DISTRIBUTION OF THE DERMAPTERA--A CASE FOR CONTINENTAL DRIFT.

E J Popham

*Entomologist (London)* 102(1272):121-124

May 1969 421 EN8

Dermaptera, Insect dissemination, Zoogeography.

7526-69  
ON A NEW SPECIES OF PHILODICUS LOEW (ASILIDAE, DIPTERA) FROM INDIA.  
K R Rao  
*Cur Sci* 38(8):196-197  
20 Apr 1969 475 SCI23  
Asilidae, Insect taxonomy, Zoogeography.

7527-69  
DISTRIBUTION OF LAKE-DWELLING CHIRONOMIDAE (DIPTERA) IN THE ALPINE REGION. (GE)  
F Reiss  
*Ann Zool Fenn* 5(1):119-125 REF  
1968 410 AN712  
Chironomidae, Diptera, Insect ecology, Lakes, Tables (data), Zoogeography.

7528-69  
ENTOMOLOGY AND PHILATELY (A CURIOUS NOMENCLATURE QUESTION). (GE)  
H Reisser  
*Entomol Z* 79(1-2):4-6,7  
15 Jan 1969 421 EN85  
Illustrations, Insect names, Insect taxonomy.

7529-69  
A LIST OF NEW TAXA AND NEW SYNONYMS PUBLISHED IN THE ENTOMOLOGICAL REVIEW IN THE PERIOD 1945-1967.  
V A Rikhter  
*Entomol Rev* 47(2, APR-JUN):222-260  
Jun 1968 421 R322AE  
Bibliography, Insect taxonomy, Nomenclature, Russian journal-Entomologicheskoye Obozreniye, p. 380-

7530-69  
PHYCITINAE-STUDY V (LEPIDOPTERA PYRALIDAE). (GE)  
U Roesler  
*Entomol Z* 79(3):13-20,21-24  
01 Feb 1969 421 EN85  
Insect taxonomy, Phycitinae, Pyralidae, Zoogeography.

7531-69  
THE MITES OF SUBFAMILY LABIDOPHORINAE ZACHVATKIN, 1941 (ACARINA, ACARINAE) FROM THE NESTS OF SMALL MAMMALS.  
V Rupes  
*Cesk Spolecnosti Zool Vestnik* 31(1):68-79 REF  
Feb 1967 410.9 C33  
Insect ecology, Insect taxonomy, Mites, Surveys, Zoogeography.

7532-69  
CONTRIBUTION TO THE KNOWLEDGE OF THE COLLEMBOLA OF CHINA. (GE)  
J Rusek  
*Acta Ent Bohemoslov* 64(3):184-194  
1967 420 C33  
Collembola, Insect taxonomy, Zoogeography, Czech abstract.

7533-69  
A REVIEW OF THE GENUS JURINIOPSIS TOWNSEND (DIPTERA: TACHINIDAE).  
C Sabrosky  
*Fla Entomol* 55(2):79-90 REF  
May 1969 420 F662  
Insect taxonomy, Tachinidae.

7534-69  
CONTRIBUTION TO THE ECOLOGY OF THE SCORPIONS (BOTHRIURIDAE). THE HABITAT OF THREE SPECIES OF BOTHRIURUS IN URUGUAY AND ITS APPLICATION IN SYSTEMATICS. (SR)  
San Martin A De Gambrardella  
*Paris Mus Nat Hist Natur Bull* 39(1, SER 2):188-196  
21 Jul 1967 410.9 P213  
Ecology, Habitats, Scorpionida, Taxonomy.

7535-69  
PHYLOGENETIC STUDIES ON CHIRONOMIDAE (DIPT.), WITH SPECIAL REFERENCE TO THE CORYNONEURA GROUP.  
D Schlee  
*Ann Zool Fenn* 5(1):130-138 REF  
1968 410 AN712  
Chironomidae, Diptera, Insect genetics, Insect identification, Insect morphology, Insect taxonomy.

7536-69  
SOME NEW OR LITTLE-KNOWN NEARCTIC TRICHOPTERA. (FR)  
F Schmid  
*Natur Can* 95(3, MAY-JUN):673-698 REF  
Jun 1968 410 N216  
Insect ecology, Insect taxonomy, Trichoptera, Zoogeography. English abstract.

7537-69  
RESULTS OF THE ALBANIAN 1961 EXPEDITION OF THE GERMAN ENTOMOLOGICAL INSTITUTE. 68. CONTRIBUTION. HYMENOPTERA APIDAE. III. (GENUS NOMADA SCOPOLI). (GE)  
M Schwartz  
*Beitr Entomol* 17(3-4):529-535  
1967 421 B392  
Insect taxonomy, Nomada, Surveys, Zoogeography. English and Russian abstracts.

7538-69  
NEW CARABUS FORMS FROM ANATOLIA (COL., CARABIDAE). (GE)  
H Schweiger  
*Entomol Bl* 64(3):157-167  
15 Feb 1969 421 EN833  
Carabidae, Insect taxonomy, Surveys, Zoogeography.

7539-69  
THE WORLD RHYPAROCHROMINAE (HEMIPTERA: LYGAEIDAE). IV. ON SOME RHYPAROCHROMINAE TYPES IN THE MUSEUM NATIONAL D'HISTOIRE NATURELLE, PARIS.  
G E Scudder  
*Paris Mus Nat Hist Natur Bull* 39(1, SER 2):151-157  
21 Jul 1967 410.9 P213  
Insect taxonomy, Lygaeidae, Rhyparochrominae, Zoogeography.

7540-69  
A FOURTH EUROPEAN LYSAPHIDUS SPECIES: LYSAPHIDUS VIATICUS N. SP. (HYMENOPTERA: APHIDIIDAE). (GE)  
U Sedlag  
*Dent Entomol Z* 16(1-3):127-130  
01 May 1969 421 D48  
Aphidiinae, Insect taxonomy.

7541-69  
REMARKS ON SOME DIPTERAN INSECTS OF THE GENUS OMPHRALE MEIGEN (DIPTERA: SCENOPINIDAE). (FR)  
E Seguy  
*Natur Can* 95(3, MAY-JUN):657-659  
Jun 1968 410 N216  
Insect biology, Insect taxonomy, Scenopinidae, Scenopinus. English abstract.

7542-69  
BRACONIDAE DESCRIBED BY L'ABBE PROVANCHER.  
R D Shenefelt  
*Natur Can* 95(3, MAY-JUN):627-656  
Jun 1968 410 N216  
Bracidae, Insect taxonomy, Zoogeography.

7543-69  
DESCRIPTIONS OF LASIODIAMESA BIPEC-TINATA SPEC. NOV. AND PAROCHLIUS KIEFFERI (GARRETT) BRUNDIN (DIPTERA: CHIRONOMIDAE).  
O A Shether

7544-69  
Beitr Entomol 17(1-2):235-247  
1967 421 B392  
Chironomidae, Insect taxonomy, Lasiodiamesa, Parochlius.

7545-69  
STUDY ON THE JAPANESE CALOCARCELIA TOWNSEND AND EUCARCELIA BARANOV (DIPTERA: TACHINIDAE).  
H Shima  
*Kyushu Univ Fac Agr J* 14(4):507-533 REF  
Nov 1968 107.6 K995  
Insect taxonomy, Tachinidae, Zoogeography.

7546-69  
COMPARATIVE SEROLOGY OF A COMPLEX SPECIES GROUP OF FOOD-PLANT SPECIALISTS: THE RHAGOLETIS POMONELLA COMPLEX (DIPTERA: TEPHRITIDAE).  
J P Simon  
*Syst Zool* 18(2):169-184 REF  
Jun 1969 410 SY8  
Electrophoresis, Immunochemistry, Insect nutrition, Insect rearing, Insect taxonomy, Rhagoletis mendax, Rhagoletis pomonella, Serological tests.  
Protein extracts of pupae from eight populations of the Rhagoletis pomonella complex reared on apples, Crataegus, Vaccinium, and Gaylussacia, were compared serologically using both quantitative (Boyden method) and qualitative (immunodiffusion and immunoelectrophoresis) techniques. Those populations feeding on apples and Crataegus were indistinguishable but were differentiated in all tests from those forms developed on Vaccinium and Gaylussacia, supporting the recognition of two entities, *R. pomonella* and *R. mendax*, within the complex.

7547-69  
THE CZECHOSLOVAKIAN SPECIES OF THE ANCYROPHORUS KRAATZ GENUS (COL., STAPH.). (76. CONTRIBUTION TO THE KNOWLEDGE OF THE STAPHYLINIDAE). (GE)  
A Smetana  
*Acta Ent Bohemoslov* 64(5):383-391  
1967 420 C33  
Ancyrophorus, Insect taxonomy, Zoogeography. English and czech abstracts.

7548-69  
A STATISTICAL STUDY ON THE SYSTEMATICS OF THE CASSIDINAE (COL., CHRYS.). (GE)  
W Steinhause  
*Dent Entomol Z* 16(1-3):147-152  
01 May 1969 421 D48  
Cerambycidae, Insect taxonomy, Statistical analysis.

7549-69  
DISTRIBUTION OF THE MACROLEPIDOPTERA IN THE BALTIC. III. NOCTURNAL MOTHS (FAM. NOCTUIDAE). (GE)  
A Sulcs J Viidalepp  
*Dent Entomol Z* 16(1-3):217-272 MAP REF  
01 May 1969 421 D48  
Noctuidae, Surveys, Zoogeography.

7550-69  
ON THE APPLICATION OF STATISTICAL METHODS IN SYSTEMATICS. (POL)  
L Sych  
*Kosmos Ser A Biol* 16(3):267-273  
1967 442.8 K84  
Insect taxonomy, Statistical analysis.

7551-69  
THE AFRICAN SPECIES OF THE GENUS LITERNA STAL (HOMOPTERA: CERCOPIDAE). (FR)  
H Synave  
*Inst Roy Sci Natur Belg Bull* 44(4):1-35  
25 Jan 1968 504 B835B  
Cercopidae, Insect taxonomy, Zoogeography.

7551-69

## ENTOMOLOGICAL SURVEY OF THE COOK ISLANDS AND NIUE. 1-HYMENOPTERA-FORMICIDAE.

R W Taylor

New Zealand J Sci 10(4):1092-1095

Dec 1967 514 N482

Formicidae, Insect taxonomy, Surveys, Zoogeography.

Three ant species are added to the 17 previously recorded from the Polynesian Cook Islands, and the first records of ants (19 species) from Niue are given. These constitute typical synthetic oceanic faunulae assembled largely, if not entirely, from propagules introduced by man.

7552-69

## THE ESTABLISHMENT IN NEW ZEALAND OF BRACON VARIEGATOR NEES (HYMENOPTERA: BRACONIDAE) A PARASITE OF COLEOPHORA SPECIES (LEPIDOPTERA: COLEOPHORIDAE).

W P Thomas

New Zealand J Sci 12(1):43-53

Mar 1969 514 N482

Bracon variegator, Coleophora, Parasitic insects, Surveys.

A parasite of Coleophora spp. in Europe, Bracon variegator Nees, introduced from France into New Zealand during the summer of 1961-62, has successfully established in localized areas of Nelson province. The presence of this parasite in Nelson field samples was first recorded in February 1966. Notes on the biology and laboratory breeding of B. variegator are given.

7553-69

## COMMENTS ON THE TAXONOMY OF SOME PALEARCTIC SPECIES OF THE MEGACHILIDAE FAMILY (HYMENOPTERA, APOIDEA). (GE)

B Tkalcu

Acta Ent Bohemoslov 64(2):91-104 REF

1967 420 C33

Hymenoptera, Insect taxonomy, Megachilidae, Czech abstract.

7554-69

## THE TRICHOPTERA OF THE LULE LAPP-MARK (SWEDEN), III. ON THE DIFFERENTIATION OF POTAMOPHYLAX CINGULATUS (STEPHENS 1837) AND P. LATIPENNIS (CURTIS 1834) (LEMNEPHILIDAE). (GE)

W Tobias

Entomol Z 79(9):96-100

02 May 1969 421 EN85

Insect taxonomy, Limnephilidae.

7555-69

## THE TRICHOPTERA OF THE LULE LAPP-MARK (SWEDEN), II. INVENTORY OF THE SPECIES, HABITATS, AND FLIGHT PERIODS. (GE)

W Tobias

Entomol Z 79(9):93-96

02 May 1969 421 EN85

Bibliography, Habitats, Insect behavior, Insect flight, Surveys, Trichoptera.

7556-69

## THE TRICHOPTERA OF THE LULE LAPP-MARK (SWEDEN), II. CATALOG OF THE SPECIES, HABITATS AND FLIGHT PERIODS. (GE)

W Tobias

Entomol Z 79(8):77-84,85-92 MAP

15 Apr 1969 421 EN85

Insect ecology, Insect taxonomy, Surveys, Trichoptera, Zoogeography.

7557-69

## A LIST OF THE HOSTS OF ENTOMOPHAGOUS INSECTS OF NEW ZEALAND.

E W Valentine

New Zealand J Sci 10(4):1100-1209 REF

Dec 1967 514 N482

Food habits, Insect taxonomy, Insects, Predaceous insects.

7558-69

## CONTRIBUTION TO THE STUDY OF THE DIPTERAN BRAULIDAE AND PUPIPARANS: HIPPOBOCCIDAE, NYCTERIBIIDAE, AND STREBIDAE. (FR)

P Vanschuytbroeck

Inst Roy Sci Natur Belg Bull 44(17):1-30

15 Apr 1968 504 B835B

Diptera, Insect taxonomy, Zoogeography.

7559-69

## CERCYON-STUDIES WITH DESCRIPTIONS OF TWO NEW GERMAN SPECIES. (GE)

H Vogt

Entomol Bl 64(3):172-191 REF

15 Feb 1969 421 EN833

Cercyon, Hydrophilidae, Insect taxonomy, Zoogeography.

7560-69

## WHAT IS LOPUS INSIGNIS REUTER, 1879 (HEM. HET. MIRIDAE). (GE)

E Wagner

Deut Entomol Z 16(1-3):185-187

01 May 1969 421 D48

Insect taxonomy, Miridae.

7561-69

## THE GLOBICEPS CRUCIATUS GROUP (HETEROPTERA, MIRIDAE). (GE)

E Wagner

Notulae Entomol 49(1):25-30

1969 421 N84

Insect taxonomy, Miridae.

7562-69

## SEVERAL NEW MIRIDS FROM LIBIA (HETEROPTERA). (GE)

E Wagner

Notulae Entomol 49(1):11-24

1969 421 N84

Insect taxonomy, Miridae.

7563-69

## RHABDOBLATTA STIPATA (WALKER, 1868), AN AQUATIC COCKROACH. (GE)

H Weidner

Entomol Z 79(10):101-106

16 May 1969 421 EN85

Aquatic insects, Blattidae, Insect taxonomy, Zoogeography.

7564-69

## RESULTS OF THE ALBANIAN 1961 EXPEDITION OF THE GERMAN ENTOMOLOGICAL INSTITUTE. 67. CONTRIBUTION. HYMENOPTERA. POMPILIDAE AND CEROPALIDAE. (GE)

H Wolf

Beitr Entomol 17(3-4):521-527

1967 421 B392

Ceropalidae, Insect taxonomy, Pompilidae, Surveys. English and Russian abstracts.

7565-69

## CYTOTAXONOMY OF NORTH-AMERICAN CHIRONOMIDAE SPECIES. (GE)

W Wulker J E Sublette J Martin

Ann Zool Fenn 5(1):155-158 REF

1968 4!0 AN712

Chironomidae, Chromosomes, Cytology, Insect genetics, Insect taxonomy, Polymorphism.

## PHYSIOLOGY AND BIOCHEMISTRY

7566-69

## EFFECT OF DDT POISONING ON THE LONGEVITY AND FECUNDITY OF THE PINK BOLLWORM.

P L Adkisson S G Wellso

J Econ Entomol 55(6):842-845

Dec 1962 421 J822

DDT, Fertility, Insecticides, Longevity, Pectinophora gossypiella, Poisoning, Toxicity.

7567-69

## EQUIPMENT FOR THE EXPERIMENTAL FEEDING OF SANDFLIES. (GE)

A N Alekseev

Angew Parasitol 10(1):1-8 REF

Feb 1969 436.8 AN4

Feeding, Insect cages, Insect rearing equipment, Psychodidae. English and Russian abstracts.

7568-69

## OBSERVATIONS AND EXPERIMENTAL DATA ON OVARY ACTIVITY IN ADULT GALLERIA MELLONELLA (LEPIDOPTERA PYRALIDAE). (FR)

P Allegret

Paris Soc Biol Compt Rend 160(10):1939-1942

20 Feb 1967 442.9 P21

Galleria mellonella, Insect histology, Insect physiology, Ovaries.

7569-69

## 1969 INSECTICIDE RECOMMENDATIONS FOR ALFALFA, CLOVER AND SOYBEANS.

Anonymous

(279-D):2P

1969 275.29 K415M

Alfalfa, Chemical control (insects), Clover, Insect pests, Insecticide application, Insecticides, Soybeans, Spraying.

7570-69

## SOME NOTES ON THE FOOD OF THE CHIRONOMID LARVAE OF A SHALLOW WOODLAND LAKE IN SOUTH FINLAND.

P D Armitage

Ann Zool Fenn 5(1):6-13

1968 410 AN712

Chironomidae, Food, Insect ecology, Insect nutrition, Larvae.

7571-69

## RESISTANCE TO ORGANOPHOSPHATES IN NEW ZEALAND STRAINS OF THE TWO-SPOTTED SPIDER MITE, TETRANYCHUS TELARIUS (L.).

G H Ballantyne R A Harrison

New Zealand J Sci 10(4):915-917

Dec 1967 514 N482

Insecticides, Organophosphorus compounds, Parathion, Tetranychus telarius.

Resistance to organophosphates has been suspected in several New Zealand strains of the two-spotted spider mite, Tetranychus telarius (L.). A topical application technique was used to confirm that two independent strains of this species are highly resistant to parathion. Precise measurements indicate that the strains developed an 1150 1210 fold level of resistance.

7572-69

## DIGESTIVE ENZYMES OF THE ALIMENTARY CANAL OF THE LARCH BARK BEETLE IPS CEMBRAE HEER.

R A Balogun

Compar Biochem Physiol 29(3):1267-1270 REF

Jun 1969 444.8 C73

Enzymes, Histochemistry, Insect biochemistry, Intestines, Ips.

7573-69

## LARVAL DIAPAUSE IN THE TICK IXODES RICINUS L. AND ITS RELATION TO EXTERNAL CONDITIONS. 7. ON THE SENSITIVITY TO PHOTOPERIODIC STIMULI DURING BLOOD-SUCKING. (RUS)

V N Belozcroy

Zool Zhur 48(5):686-700 REF

May 1969 410 R92

Ixodes ricinus, Larvac, Photoperiodism. English abstract.

7574-69

## THE SECRETORY ACTIVITY OF CORPORA ALLATA DURING SEXUAL MATURATION AND IMAGINAL DIAPAUSE IN GRYLLUS

## DOMESTICUS L. AND LEPTINOTARSA DECEMLINEATA SAY.

T G Belyaeva

*Acta Ent Bohemoslov* 64(1):1-15 REF

1967 420 C33

Corpora allata, Glands (insects), Gryllus domesticus, Insect physiology, Leptinotarsa decemlineata, Metamorphosis, Secretion.

7575-69

## RELATIVE ACTIVITY OF PYRETHROIDS IN AEROSOL FORM.

I V Bessonova I V Vashkov J P Volkov A P

Volkova E B Zhuk

*J Hyg Epidemiol Microbiol Immunol* 13(1):56-63 REF

1969 448.8 J826

Aerosols, Chemical control (insects), Insecticidal aerosols, Musca domestica, Pyrethrum.

7576-69

## CERTAIN PROBLEMS CONCERNING THE STUDY OF CHIRONOMIDAE POPULATIONS. (FR)

N Botnariuc P Albu

*Ann Zool Fenn* 5(1):22-26 REF

1968 410 AN712

Chironomidae, Insect ecology, Insect taxonomy, Larvae, Population statistics.

7577-69

## RATING VARIOUS DETECTION METHODS FOR IXODES RICINUS. (GE)

I Bouckova V Dyk

*Angew Parasitol* 10(1):8-14

Feb 1969 436.8 AN4

Insect collecting equipment, Insect detection, Ixodes ricinus, Methodology. English, Russian and Czech abstracts.

7578-69

## UTILIZATION OF DDT RESISTANCE AS A MEANS OF INVESTIGATING THE POSSIBLE EXISTENCE OF HOST-SPECIFIC STRAINS OF THE BOLLWORM, HELIOTHIS ZEA.

J R Bradley Jr J B Graves D F Clower

*J Econ Entomol* 59(2):460-462

Apr 1966 421 J822

Cotton, DDT, Heliothis zea, Insect hosts, Insecticide resistant insects, Larvae.

7579-69

## POLYGENE STRUCTURE OF INSECT HEMAGLOBIN. CHIRONOMUS TH. THUMMI (DIPTERA). (GE)

G Braunitzer G Buse S Braig

*Naturwissenschaften* 56(4):215

Apr 1969 474 N213

Blood chemistry, Chironomus thummi, Electrophoresis, Hemoglobin, Insect biochemistry, Peptides.

7580-69

## HUNTING BEHAVIOR OF THE CTENIZIDAE.

H H R Buchli

*Amer Zool* 9(1):175-193 REF

Feb 1969 410 AM3

Ctenizidae, Feeding, Insect behavior, Insect ecology, Insect physiology, Predaceous insects, Spiders.

7581-69

## SUSCEPTIBILITY OF THE AEDES ALBOPIC-TUS AND A. AEGYPTI CELL LINES TO INFEC-TION WITH ARBOVIRUSES.

S M Buckley

*Soc Exp Biol Med Proc* 131(2):625-630

Jun 1969 442.9 SO1

Aedes aegypti, Aedes albopictus, Arboviruses, Insect diseases.

7582-69

## THE CONVERSION OF GLUTAMATE TO ALANINE IN THE TSETSE FLY (GLOSSINA MORSITANS).

E Bursell

*Compar Biochem Physiol* 23(3):825-829

Dec 1967 444.8 C73

Alanine, Carbon isotopes, Glossina morsitans, Glutamic acid, Insect biochemistry, Insect metabolism, Radioactive tracers.

7583-69

## SYMPATRIC HOST RACE FORMATION AND SPECIATION IN FRUGIVOROUS FLIES OF THE GENUS RHAGOLETIS (DIPTERA, TEPHRITIDAE).

G L Bush

*Evolution* 23(2):237-251 MAP REF

Jun 1969 443.8 EV62

Insect evolution, Population, Rhagoletis, Zoogeography.

7584-69

## EVOLUTION OF WING REDUCTION IN CRANE FLIES (DIPTERA: TIPULIDAE).

G W Byers

*Evolution* 23(2):346-354 REF

Jun 1969 443.8 EV62

Insect evolution, Temperature, Tipulidae, Wings (insects), Zoogeography.

7585-69

## CHEMOSTERILISATION OF THE RED BOLL-WORM, DIPAROPSIS CASTANEA HMPS. (LEPIDOPTERA: NOCTUIDAE).

D G Campion

*Trop Sci* 10(4):222-232 REF

1968 26 T756

Baits, Chemosterilants, Diparopsis castanea, Insect behavior, Noctuidae, Sex behavior, Tepa.

7586-69

## THE FORMATION OF A RUDIMENTARY SPERMATOPHORE BY THE RED BOLL-WORM.

D G Campion

*Trop Sci* 10(4):233-236

1968 26 T756

Carbamates, Carbaryl, Chemosterilants, Diparopsis castanea, Insect morphology, Insect physiology, Insecticides, Noctuidae, Spermatophores.

7587-69

## RESULTS OF TESTS WITH BACILLUS THURINGIENSIS BERLINER AGAINST GYPSY MOTH LARVAE.

G E Cantwell S R Dutky J C Keller C G

Thompson

*J Invertebrate Pathol* 3(2):143-147

Jun 1961 421 J826

DDT, Land improvement, Larvae.

7588-69

## HABITAT AND DISTRIBUTION OF MECOPTERA IN EAST TENNESSEE.

D M Caron

*Tenn Acad Sci J* 42(3):73-75

Jul 1967 500 T25A

Habitats, Insect biology, Mecoptera, Zoogeography.

7589-69

## MODES OF ESTABLISHING THE FLICKER RESPONSE IN THE INSECT EYE IN MODULATED ILLUMINATION. (FR)

P Carricaburu R Fouchard

*Acad Sci Compt Rend Ser D Sci Nat* 268(15, 1ST SEMESTER):1955-1957

14 Apr 1969 505 P21

Eyes, Insect behavior, Mantispidae, Orthoptera, Photosensitization.

7590-69

## THE ACTION OF CORPORA CARDIACA EXTRACTS ON INTESTINAL PERISTALSIS IN LOCUSTA MIGRATORIA. (FR)

M Cazal

*Arch Zool Exp Gen* 110(1):83-89 REF

15 May 1969 410 AR24

Corpora cardiaca, Insect physiology, Locusta migratoria. English and German abstracts.

7591-69

## AN AUTOSOMAL RECESSIVE YELLOW-EYED MUTATION IN THE BLOWFLY.

P C Chabora

*J Hered* 58(2, MAR-APR):87-88

Apr 1967 442.8 AM3

Eyes, Insect genetics, Insect morphology, Insect mutation, Phaenicia sericata, Pigments (insect), Ultraviolet rays.

7592-69

## EVIDENCE OF A BIOGEN AMINE IN THE STOMATOGASTRIC NERVOUS SYSTEM OF THE INSECTA: HISTOCHEMICAL AND ULTRASTRUCTURAL STUDY. (FR)

B Chanussot J Dando M Moulin M S Laverack

*Acad Sci Compt Rend Ser D Sci Nat* 268(16, 1ST SEMESTER):2101-2104 REF

21 Apr 1969 505 P21

Amines, Blaberus craniifer, Catechol amines, Cytology, Insect physiology, Nerves, Schistocerca gregaria.

7593-69

## NIGHTS FLIGHT OF THE AUSTRALIAN PLAGUE LOCUST. CHORTOICETES TERMINIFERA WALK., IN RELATION TO STORMS.

D P Clark

*Australian J Zool* 17(2):329-352 REF

Jun 1969 410 AU73

Chortoicetes terminifera, Insect flight, Population, Rainfall.

7594-69

## FEEDING BEES.

A A Clemson

*Agr Gaz New S Wales* 80(4):201-205

Apr 1969 23 N472

Apiculture, Apis mellifera, Insect nutrition, Insect rearing equipment, Sucrose, Syrups.

7595-69

## AN EXPERIMENT ON SELECTION FOR MIMICRY.

L M Cook

*Entomologist (london)* 102(1272):107-113 REF

May 1967 421 EN8

Insect evolution, Insect protective devices, Mimicry, Natural selection, Predators.

7596-69

## STUDIES ON THE TRANSFER FUNCTION OF A COCKROACH MECHANORECEPTOR.

A Crowe

*Compar Biochem Physiol* 20(1):13-25 REF

Jan 1967 444.8 C73

Insect physiology, Mechanoreceptors, Nervous system, Periplaneta americana, Statistical analysis.

7597-69

## ON SOME PROBLEMS WITH THE BIONOMICS OF THE BEET NEMATODE (HETERODERA SCHACHTII SCHMIDT, 1871). (GE)

J Curi I Zmoray

*Biologia (bratislava)* 22(2):125-131

1967 442.8 B5265

Beets, Ecology, Heterodera schachtii, Plant nematodes, Temperature. Czech and Russian abstracts.

7598-69

## SUSCEPTIBILITY OF ARCTIC MOSQUITOES TO DDT AND MALATHION.

T J Curtin

*J Econ Entomol* 59(6):1528

Dec 1966 421 J822

Aedes impiger, Aedes nigripes, Culicidae, DDT, Malathion.

7599-69

## NEMATODES ASSOCIATED WITH THE PINE-BARK BEETLE, HYLASTES ATER, IN NEW ZEALAND.

P S Dale

*New Zealand J Sci* 10(1):222-234 REF

Mar 1967 514 N482

Hylastes ater, Insect diseases, Nematodes.

Samples of the Hylastes ater from fourteen localities between Auckland and South Canterbury were

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7600-69

examined for nematodes. Four species were found, and all samples yielded nematodes of at least two species. These four species have all been recorded from bark beetles in Germany but seven other species associated with *H. ater* in Germany have not been found in New Zealand. There is evidence that climactic differences between New Zealand and Germany have altered the pattern of infection of one of the introduced nematodes.

7600-69

EFFECTS OF DIETARY LIPIDS ON SURVIVAL AND DEVELOPMENT OF THE SAW-TOOTHED GRAIN BEETLE, *ORYZAEPHILUS SURINAMENSIS* (L.) (COLEOPTERA: SILVANIDAE).

G R F Davis

*Rev Can Biol* 26(2):119-124 REF

Jun 1967 442.8 R325

Insect metabolism, Insect nutrition, Insect physiology, Lipids, *Oryzaephilus surinamensis*.

7601-69

THE IDENTIFICATION AND DETERMINATION OF PHOSPHAGEN IN INSECTS AND THEIR EGGS.

F Di Jeso M Malcovati M T Gaetani M L Speranza

*Compar Biochem Physiol* 20(2):607-618 REF

Feb 1967 444.8 C73

Histochemistry, Insect biochemistry, Insect eggs, Insects, Phosphagen.

7602-69

RENEWED INFORMATION ON CAMPTOPOEUM FRONTALIS (F.) IN THE HALLE/SAALE VICINITY (HYM.: APOIDAEA). (GE)

M Dorn

*Deut Entomol Z* 16(1-3):55-57

01 May 1969 421 D48

Apoidea, Insect morphology, Larvae.

7603-69

A PUPAL STRUCTURE IN *SIMULIUM CLATHRINUM* MACKERRAS AND MACKERRAS AND RELATED SPECIES (DIPTERA: SIMULIIDAE).

L J Dumbleton

*New Zealand J Sci* 10(3):661-663

Sep 1967 514 N482

Cuticle, Pupae, Simuliidae.

A description is given of a cuticular structure which partially encloses a group of small setae immediately anterior to the thoracic gill on the pupa of *Simulium clathrinum* M. and M. and those related species.

7604-69

POLYMORPHISM IN THE MIMETIC BUTTERFLY *HYPOLIMNAS MISIPPUS* L. IN GHANA.

M Edmunds

*Heredity* 24(2):281-301 REF

May 1969 443.8 H42

Danaidae, Insect genetics, Mimicry, Nymphalidae, Polymorphism, Population.

7605-69

CONTEMPORARY MALLOPHAGA LITERATURE. (GE)

W Eichler J Zlotorzycka

*Angew Parasitol* 10(1):53-60 REF

Feb 1969 436.8 AN4

Bibliography, Mallophaga, Reviews.

7606-69

OCCURRENCE OF *VANESSA CARDUI* L. (LEPIDOPTERA, NYMPHALIDAE) IN FINLAND.

S Ekholm

*Notulae Entomol* 49(1):1-5

1969 421 N84

Insect migration, *Vanessa cardui*.

7607-69

BASE COMPOSITION AND THERMAL DENATURATION OF DNA ISOLATED FROM *ANAPLASMA MARGINALE*.

# BIBLIOGRAPHY

R D Ellender G T Dimopoulos

*Soc Exp Biol Med Proc* 125(1):82-85 REF

May 1967 442.9 SO1

*Anaplasma marginale*, Calves, Histochemistry, Nucleic acids, Proteins.

DNA, isolated by two methods, from purified *A. marginale*, was found to possess average molar ratios of A/T and G/C of 1.9 and 2.65, respectively. There was also a lack of increase in hyperchromicity of isolated DNA in thermal denaturation studies. Attempts to isolate RNA or to detect U were unsuccessful.

7608-69

INFRASTRUCTURAL STUDY OF THE MOLTING GLANDS IN *LOCUSTA MIGRATORIA MIGRATORIOIDES* (R. ET F.). II. MORPHOLOGICAL ANALYSIS OF THE DEGENERATIVE STAGES IN THE GREGARIOUS IMAGOS. (FR)

M A Fain-Maurel P Cassier

*Arch Zool Exp Gen* 110(1):91-126 REF

15 May 1969 410 AR24

Electron microscopy, Glands (insects), Insect morphology, *Locusta migratoria migratoria*, Molting (insects). English and German abstracts

7609-69

THE PHARMACOLOGY OF CARDIOACCELERATORS IN THE CENTRAL NERVOUS SYSTEM OF *PERIPLANETA AMERICANA* (L.).

F E Gardner H D Rounds

*Compar Biochem Physiol* 29(3):1071-1078

Jun 1969 444.8 C73

Atropine, Central nervous system, Dorsal vessel, Eserine, Insect physiology, *Periplaneta americana*, Picrotoxin, Tissue culture.

7610-69

AN ANALYSIS OF NATURAL SELECTION IN LABORATORY POPULATIONS OF *DACUS* (TEPHRITIDAE: DIPTERA).

J H Gee

*Evolution* 23(2):212-224 REF

Jun 1969 443.8 EV62

*Dacus*, Insect rearing, Polymorphism, Population.

7611-69

CHANGES IN LIPID CONTENT DURING THE REPRODUCTIVE CYCLE OF *LEUCOPHAEA MADERAE* AND EFFECTS OF THE JUVENILE HORMONE ON LIPID METABOLISM IN VITRO.

L I Gilbert

*Compar Biochem Physiol* 21(2):237-257 REF

May 1969 444.8 C73

Insect physiology, Juvenile hormone, *Leucophaea maderae*, Lipids, Reproduction, Tissue culture.

7612-69

ULTRASTRUCTURE OF THE COXAL GLANDS OF THE GENUS *ORNITHODOROS* (ACARI: ARGASIDAE). (GE)

W Groepler

*Z Wiss Zool* 178(3-4):235-275 REF

1969 410 Z3

Coxal glands, Cytology, Electron microscopy, Glands (insects), Insect physiology, *Ornithodoros*.

7613-69

NOTES ON THE MORPHOLOGY OF *ALYCUS ROSEUS* C. L. KOCH.

L. van der Hammen

*Leiden Rijksmuseum Natuur Hist Zool Mededel* 43(15):177-202 REF

26 Feb 1969 410.9 L59

Insect morphology, *Opilioacaridae*.

7614-69

SEASONAL VARIATION IN THE MARINE CHIRONOMID, *CLUNO TSUSHIMENSIS* TOKUNAGA (DIPTERA).

H Hashimoto

*Ann Zool Fenn* 5(1):41-48 REF

1968 410 AN712

Chironomidae, Climate, Insect physiology, Seasonal variation.

7615-69

THE CHARCOAL DIGGER WASP, *ISODONITA PELOPOEIFORMIS*.

G H Heinrich

*Fla Entomol* 52(2):113

May 1969 420 F662

Charcoal, Insect behavior, Insect nests, Sphecidae.

7616-69

STUDY OF *OSMIA CORNUTA*'S CONSTRUCTION AFTER INJECTIONS OF LABELLED SUBSTANCES. (FR)

Y Heroin-Delauney

*Paris Soc Biol Compt Rend* 160(11):2027-2030

26 Apr 1967 442.9 P21

Development, Insect physiology, *Osmia cornuta*, Radioactive tracers.

7617-69

PLASTRON RESPIRATION IN THE MARINE FLY *CANACE*.

H E Hinton

*Mar Biol Ass UK J* 47(2):319-327

1967 442.9 M331

*Canace*, *Canaceidae*, Insect evolution, Insect respiration, Larvae, Pupae.

7618-69

THE EFFECTS OF METHYLARACHNOATE DIHYDROCHLORIDE ON THE COLOUR CHANGE AND MOULTING BEHAVIOUR IN THE LARVAE OF *CERURA VINULA* L. (LEPIDOPTERA). (GE)

Ch Hintze

*Biol Zentralbl* 88(1, JAN-FEB):77-83

Feb 1969 442.8 B523

Hormones, Insect biochemistry, Insect color, Insect nutrition, Larvae, Molting (insects), Notodontidae.

7619-69

THE EFFECT OF HORMONES ON THE INTESTINAL PROTEINASE ACTIVITY OF ADULT *PYRRHOCORIS APTERUS* L. (HEMIPTERA).

H Hrubesova K Slama

*Acta Ent Bohemoslov* 64(3):175-183 REF

1967 420 C33

Hormones, Insect physiology, Intestines, Proteinases, *Pyrrhocoris apterus*.

7620-69

THE EFFECT OF CHLORIDE IONS ON MOTH SKELETAL MUSCLE FIBRES.

H Huddart

*Compar Biochem Physiol* 20(1):355-359

Jan 1967 444.8 C73

Bio-electric potential, Chlorides, Insect biochemistry, Ions, Muscles, Sphingidae.

7621-69

EXPERIMENTAL STUDY ON MALE REPRODUCTION SYSTEMS OF THE MEALWORM: *TENEBRIOS MOLITOR* (COLEOPTERA: TENEBRIONIDAE). (FR)

C Huet

*Paris Soc Biol Compt Rend* 160(11):2021-2025

26 Apr 1967 442.9 P21

Insect physiology, Nervous system, Reproductive organs, *Tenebrio molitor*.

7622-69

A CONTRIBUTION TO THE KNOWLEDGE OF THE DIAPAUSE IN *PERILLUS BIOCULATUS* (FABR.) (HETEROPTERA, PENTATOMIDAE).

J Jasic

*Acta Ent Bohemoslov* 64(5):333-334

1967 420 C33

Insect physiology, Pentatomidae, *Perillus bioculatus*, Photoperiodism.

7623-69

INFLUENCE OF MUTUAL RELATIONS OF ORGANISMS, ESPECIALLY CHIRONOMIDAE, IN NATURAL BENTHIC COMMUNITIES, ON THEIR ABUNDANCE.

Z Kajak K Dusog A Stanczykowska

*Ann Zool Fenn* 5(1):49-56 REF

1968 410 AN712  
Chironomidae, Environment, Insect ecology, Lakes.

7624-69  
FEEDING OF BENTHIC NON-PREDATORY CHIRONOMIDAE IN LAKES.  
Z Kajak J Warda  
*Ann Zool Fenn* 5(1):57-64 REF  
1968 410 AN712  
Algae, Chironomidae, Feeding habits (insects), Insect nutrition, Lakes.

7625-69  
THE EFFECT OF IONTOPHORETIC INJECTION OF L-GLUTAMIC ACID AND GAMMA-AMINO-N-BUTYRIC ACID ON THE MINIATURE END-PLATE POTENTIALS AND CONTRACTURES OF THE COXAL MUSCLES OF THE COCKROACH PERIPLANETA AMERICANA L.  
G A Kerkut R J Walker  
*Compar Biochem Physiol* 20(3):999-1003 REF  
Mar 1967 444.8 C73  
Amino acids, Bio-electric potential, Electrophysiology, Glutamic acid, Muscles, Periplaneta americana.

7626-69  
ANNULATE LAMELLAE AND YOLK NUCLEI IN OOCYTES OF THE DRAGONFLY, LIBELLULA PULCHELLA.  
R G Kessel H W Beams  
*J Cell Biol* 42(1):185-201 REF  
Jul 1969 442.8 J828  
Cytology, Electron microscopy, Insect eggs, Libellula, Odonata.

7627-69  
PHOSPHOLIPASE ACTIVITY IN MUSCA DOMESTICA L.  
M A Q Khan E Hodgson  
*Compar Biochem Physiol* 23(3):899-910 REF  
Dec 1967 444.8 C73  
Insect biochemistry, Insect metabolism, Musca domestica, Phospholipase.

7628-69  
THE EFFECT OF GENOTYPE, MATING STATUS, WEIGHT AND EGE PRODUCTION ON LONGEVITY IN DROSOPHILA MELANOGASTER.  
J F Kidwell L Malick  
*J Hered* 58(4, JUL-AUG):169-172  
Aug 1967 442.8 AM3  
Drosophila melanogaster, Genes, Insect behavior, Insect eggs, Insect genetics, Insect physiology, Longevity, Sex behavior.

7629-69  
SEASONAL AND DIEL EMERGENCE OF CHIRONOMUS SALINARIUS KIEFF. (DIPT., CHIRONOMIDAE) NEAR BERGEN, WESTERN NORWAY.  
R Koskinen  
*Ann Zool Fenn* 5(1):65-70 MAP REF  
1968 410 AN712  
Chironomidae, Insect ecology, Insect morphology, Marine biology, Seasonal variation.

7630-69  
SEASONAL EMERGENCE OF CLUNIO MARINUS HALIDAY (DIPT., CHIRONOMIDAE) IN WESTERN NORWAY.  
R Koskinen  
*Ann Zool Fenn* 5(1):71-75 MAP REF  
1968 410 AN712  
Chironomidae, Insect morphology, Marine biology, Seasonal variation.

7631-69  
INVESTIGATION INTO THE VARIABILITY OF EUROPEAN POPULATIONS OF ORTHOTYLUS ERICETORUM FALL. (HETEROPTERA: MIRIDAE). (GE)  
V Koziskova  
*Acta Ent Bohemoslov* 64(1):16-36 REF  
1967 420 C33  
Insect morphology, Miridae, Orthotylus ericetorum, Population, Zoogeography. Czech abstract.

7632-69  
VARIOUS ASPECTS OF THE BIOLOGY OF AGELENA CONSOCIATA DENIS WHEN BRED IN THE LABORATORY.  
B Krafft  
*Amer Zool* 9(1):201-210 REF  
Feb 1969 410 AM3  
Agelena consociata, Insect behavior, Insect physiology, Insect rearing, Predaceous insects, Spider webs, Spiders.

7633-69  
INVESTIGATIONS INTO THE RELATION OF EGG LENGTH AND EGG QUANTITY PER BATCH TO THE SIZE OF THE FEMALE ANOPHELES CLAVIGER TYPICUS MEIGEN WITH REFERENCES TO THE DEVELOPMENT IN SIZE OF THE LARVAE. (INVESTIGATION INTO THE INSECT FAUNA FROM AREA NR. 15) (DIPTERA: CULICIDAE). (GE)  
F Kuhlhorn  
*Beitr Entomol* 17(3-4):337-347 REF  
1967 421 B392  
Anopheles claviger, Insect eggs, Insect physiology, Ovulation. English and Russian abstracts.

7634-69  
STUDY OF DENUCLEOSIS OF GALLERIA MELLONELLA L. (LEPIDOPTERA) BY FLUORESCENT TECHNIQUES. (FR)  
E, Kurstak I Goring S Garzon J R Cote  
*Natur Can* 95(3, MAY-JUN):773-783 REF  
Jun 1968 410 N216  
Dna viruses, Fluorescent antibody technic, Galleria mellonella, Insect diseases. English abstract.

7635-69  
TRANSMISSION OF DENONUCLEOSIS VIRUS BY PARASITISM OF A HYMENOPTERAN. (FR)  
E Kurstar C Vago  
*Rev Can Biol* 26(4):311-316 REF  
Dec 1967 442.8 R325  
Galleria mellonella, Ichneumonidae, Insect diseases, Nemeritis canescens, Parasitic insects, Viruses. English abstract.

7636-69  
SOME RESULTS ABOUT SELECTION OF ACANTHOSCELIDES OBTECTOS WITH INSTANTLY EGG-LAYING RESPONSE ON THE DELAYING PRESENTATION OF THE PHASEOLUS VULGARIS SEEDS. (FR)  
V Labeyrie  
*Paris Soc Biol Compt Rend* 160(8-9):1696-1699  
04 Feb 1967 442.9 P21  
Acanthoscelides obtectus, Egg production, Kidney beans.

7637-69  
THE METABOLISM OF NUCLEIC ACIDS IN THE WING BUDS OF PIERIS BRASSICAE (L.) (LEPIDOPTERA, PIERIDAE). (FR)  
P Lafont  
*Acad Sci Compt Rend Ser D Sci Nat* 268(16, 1ST SEMESTER):2133-2135  
21 Apr 1969 505 P21  
Insect biochemistry, Insect metabolism, Insect physiology, Nucleic acids, Pieris brassicae, Thymidine, Wings (insects).

7638-69  
IONIC DISTRIBUTION STUDIES IN HAEMOLYMPH FROM DIFFERENT PARTS OF PERIPLANETA AMERICANA BY RADIOACTIVE TRACERS.  
S K Lahiri A Roy D Banerjee S C Jamdar S R Basu Et Al  
*Indian J Exp Biol* 5(1):27-28 REF  
Jan 1967 442.8 IN2  
Blood, Chlorides, Insect biochemistry, Iodine, Ions, Iron, Periplaneta americana, Radioisotopes, Sodium.

7639-69  
EXPERIMENTAL INVESTIGATION INTO THE MORPHOLOGICAL VARIABILITY OF MUSCA DOMESTICA L. (DIPT. MUSCIDAE). (GE)  
V Lavtschiv M Jelesova  
*Zool Anz* 181(5-6, NOV-DEC):411  
Dec 1968 410 Z7  
Musca domestica, Polymorphism, Temperature.

7640-69  
A METHOD OF MEASURING RESPIRATORY EXCHANGES IN THE TOTAL INSECT. (FR)  
J R Le Berre N Hawlitzky  
*Paris Soc Biol Compt Rend* 161(5):999-1004  
25 Nov 1967 442.9 P21  
Insect respiration, Methodology, Statistical analysis.

7641-69  
RNA AND PROTEIN SYNTHESIS IN PUFFS ISOLATED FROM SALIVARY GLAND CHROMOSOMES OF CHIRONOMUS. (GE)  
M Lezzi  
*Chromosoma* 21(1):72-88 REF  
02 Mar 1967 442.8 C46  
Chironomus tentans, Chromosomes, Culture media, Insect biochemistry, Insect physiology, Proteins, Radioactive tracers, Ribonucleic acid. English abstract.

7642-69  
SOME CHARACTERISTICS OF GLYCOGEN FROM A FLY PUPA (CALLIPHORA ERYTHROCEPHALA MEIG.).  
N O Lindh  
*Compar Biochem Physiol* 20(1):209-216 REF  
Jan 1967 444.8 C73  
Calliphora vicina, Glycogen, Insect biochemistry, Pupae.

7643-69  
PROTEIN SYNTHESIS IN CELL-FREE PREPARATIONS FROM MUSCA DOMESTICA L..  
S Litvak J Mancilla M Agosin  
*Compar Biochem Physiol* 21(3):441-448 REF  
Jun 1967 444.8 C73  
Enzymes, Insect biochemistry, Musca domestica, Proteins, Tissue culture.

7644-69  
THE INFLUENCE OF TEMPERATURE AND RELATIVE HUMIDITY ON THE WEIGHT LOSS OF THE PUGNACIOUS ANT, ANOPLOLEPIS CUSTODIENS (SMITH). (AF)  
J F Louw  
*S Afr J Agr Sci* 11(3):575-582  
Sep 1968 24 SU3  
Formicidae, Humidity, Insect physiology, Temperature.

7645-69  
JOINT ACTION OF DDT-CONTAINING INSECTICIDE MIXTURES AGAINST DDT-RESISTANT PINK BOLLWORMS.  
W L Lowry R S Berger  
*J Econ Entomol* 57(1):181-182  
Feb 1964 421 J822  
DDT, Insecticide resistant insects, Pectinophora gossypiella.

7646-69  
BOLLWORM AND TOBACCO BUDWORM RESISTANCE TO SEVERAL INSECTICIDES IN THE LOWER RIO GRANDE VALLEY OF TEXAS.  
W L Lowry R L McGarr O T Robertson R S Berger H M Graham  
*J Econ Entomol* 58(4):732-734, TABS.  
Aug 1965 421 J822  
DDT, Heliothis virescens, Heliothis zea, Insecticide resistant insects.

7647-69  
THE CEREAL LEAF BEETLE IN OHIO.  
W F Lyon R E Treece  
*Ohio State Univ Ext Leafl* (150):4P MAP

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7648-69

Jan 1969 275.29 OH32EL

Azinphosmethyl, Carbamates, Carbaryl, Chemical control (insects), Insect pests, Insect physiology, Insecticides, Malathion, Organophosphorus compounds, Oulema melanopa, Plant injuries.

7648-69

**FIRST EXPERIMENTAL REARINGS OF HYLOBIUS ABIETIS LARVAE ON A SYNTHETIC MEDIUM. (FR)**

C B Malphettes

*Forestier Sci Ann* 25(3):189-192

1968 99.9 F845

Culture media, Curculionidae, *Hylobius abietis*, Insect physiology, Insect rearing, Larvae. English and German summaries.

7649-69

**ON A METHOD OF POPULATION ESTIMATION USING CAPTURE-RECAPTURE DATA. (FR)**

B F J Manly

*Entomologist (london)* 102(1272):117-120

May 1969 421 EN8

Methodology, Population, Statistical analysis, Surveys.

7650-69

**BIONOMICS OF STETHORUS GILVIFRONS MULSANT (COLEOPTERA: COCCINELLIDAE). (FR)**

L M L Mathur

*Madras Agr J* 56(1):7-11

Jan 1969 22 M262

Bionomics, Castorbeans, Coccinellidae, Insect eggs, Insect physiology, Predaceous insects, *Stethorus*, *Tetranychus telarius*.

7651-69

**INVESTIGATION INTO THE POPULATION FLUCTUATIONS OF OSCINELLA FRIT L.. (GE)**

K Mayer

*Deut Entomol Z* 16(1-3):115-126 REF

01 May 1969 421 D48

Insect biology, Insect ecology, *Oscinella frit*, Population.

7652-69

**THE CAPACITY OF INSECTS TO LEARN AND TO EVALUATE VISUAL STIMULI. (FR)**

G A Mazokhin-Porshnyakov

*Entomol Rev* 47(2, APR-JUN):211-221 REF

Jun 1968 421 R322AE

Bee behavior, Bees, Color, Size, Stimuli, Vision. Russian journal-Entomologicheskoye Obozreniye, p. 362-379.

7653-69

**NEUROMUSCULAR TRANSMISSION IN INSECTS: EFFECT OF INJECTED CHEMICAL AGENTS. (FR)**

F V McCann R W Reece

*Compar Biochem Physiol* 21(1):115-124 REF

Apr 1967 444.8 C73

Acetylcholine, Electrophysiology, Eserine, Glutamic acid, Muscles, Nerves, *Sarcophaga bullata*.

7654-69

**THE EFFECT OF METABOLIC INHIBITORS ON THE MOTH HEART. (FR)**

F V McCann

*Compar Biochem Physiol* 20(2):399-409 REF

Feb 1967 444.8 C73

Antimetabolites, Dinitrophenol, 2,4-, Dorsal vessel, Electrophysiology, *Hyalophora cecropia*, Insect physiology, Sodium azide.

7655-69

**SPIDER VENOMS: BIOCHEMICAL ASPECTS. (FR)**

J D McCrone

*Amer Zool* 9(1):153-156 REF

Feb 1969 410 AM3

Amines, Amino acids, *Atrax robustus*, *Ctenus ferus*, Enzymes, Insect biochemistry, *Latrodectus mactans*, *Lycosa erythrogaster*, Peptides, Spiders, Venoms.

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7656-69

**THE METABOLISM OF C-14 LABELED DDT IN LARVAE, PUPAE, AND ADULTS OF DROSOPHILA MELANOGASTER. (FR)**

D B Menzel S M Smith R Miskus W M Hoskins

*J Econ Entomol* 54(1):9-12

Feb 1961 421 J822

Dicofol, DDT, *Drosophila melanogaster*, Metabolism, Radioactive tracers.

7657-69

**DAILY PERIODICITY OF THE FORMATION OF HONEYBEE ENDOCUTICLE LAYERS. (FR)**

R Menzel K Moch G Wladarz M Lindauer

*Biol Zentralbl* 88(1 JAN-FEB):61-67

Feb 1969 442.8 B523

*Apis mellifera*, Cuticle, Insect physiology, Photoperiodism.

7658-69

**THE INFLUENCE OF TEMPERATURE UPON THE GROWTH OF ACROLEPIA ASSECTELLA ZELLER. (FR)**

M Meudec

*Paris Soc Biol Compt Rend* 160(8-9):1693-1696

04 Feb 1967 442.9 P21

Acrolepia assectella, Development, Insect physiology, Larvae, Temperature.

7659-69

**ADENOSINETRIPHOSPHATASES FROM THORACIC MUSCLE MITOCHONDRIA OF THE AMERICAN COCKROACH. (FR)**

R R Mills D G Cochran

*Compar Biochem Physiol* 20(3):919-923

Mar 1967 444.8 C73

Adenosine triphosphatase, Chromatography, Insect biochemistry, Mitochondria, Muscles, *Periplaneta americana*, Thorax.

7660-69

**INVESTIGATION OF THE LATENT PERIOD OF THE OAK LEAF ROLLER TORTRIX VIRIDANA L. (LEPIDOPTERA). (FR)**

J Moeller

*Dent Entomol Z* 16(1-3):77-79

01 May 1969 421 D48

Insect physiology, Population, *Tortrix viridana*.

7661-69

**CORTISOL AND GROWTH IN INSECTS. (FR)**

W Mordue

*Compar Biochem Physiol* 23(3):721-727 REF

Dec 1967 444.8 C73

Hormones, Hydrocortisone, Insect physiology, *Schistocerca gregaria*, *Tenebrio molitor*.

7662-69

**SOME ECOLOGICALLY INTERESTING CHIRONOMIDAE FROM THE LAKE REGION OF STECHLIN. (FR)**

G Mothes

*Ann Zool Fenn* 5(1):92-96 REF

1968 410 AN712

Chironomidae, Insect ecology, Insect morphology, Insect taxonomy.

7663-69

**FATTY ACID COMPOSITION OF THE GLYCERIDE AND FREE FATTY ACID FRACTIONS OF THE FAT BODY AND HEMOLYMPH OF THE COCKROACH, PERIPLANETA AMERICANA (L.). (FR)**

D R Nelson A C Terranova D R Sukkstad

*Compar Biochem Physiol* 20(3):907-917 REF

Mar 1967 444.8 C73

Aging, Blood, Chromatography, Fat body, Fatty acids, Glycerides, *Periplaneta americana*.

7664-69

**EXPERIMENTS WITH THE MEASUREMENT OF THE INTENSITY OF THE WING BEAT RESONANCE OF THE MOSQUITO, CULEX PIPiens. (FR)**

D Novak M Migota

*Dent Entomol Z* 16(1-3):273-275

01 May 1969 421 D48

*Culex pipiens*, Insect flight, Sound waves, Wings (insects).

7665-69

**MORPHOGENETIC ANALYSIS OF THE EFFECTS OF JUVENILE HORMONE ANALOGUES AND OTHER MORPHOGENETICALLY ACTIVE SUBSTANCES ON EMBRYOS OF SCHISTOCERCA GREGARIA (FORSKAL). (FR)**

V J A Novak

*J Embryol Exp Morphol* 21(1):1-21 REF

Feb 1969 442.8 J829

Genetics, Hormones, Insect eggs, Insect morphology, Insects, Larvae, *Schistocerca gregaria*, Tissues. English and French summaries.

7666-69

**TAXONOMY, ECOLOGY AND BEHAVIOR OF THE NORTHERN BALTIc CLUNIO MARINUS HALID. (DIPT., CHIRONOMIDAE). (FR)**

R Olander E Palmen

*Ann Zool Fenn* 5(1):97-110 MAP REF

1968 410 AN712

Chironomidae, Insect behavior, Insect ecology, Insect taxonomy.

7667-69

**ADAPTATIONS OF ARCTIC CHIRONOMIDAE. (FR)**

D R Oliver

*Ann Zool Fenn* 5(1):111-118 REF

1968 410 AN712

Chironomidae, Insect morphology.

7668-69

**CONTRIBUTION TO THE STUDY OF MOSQUITOES (DIPTERA, CULICINAE) OCCURRING IN SOME AREAS OF CENTRAL AND SOUTH MORAVIA. (FR)**

P Palicka

*Acta Ent Bohemoslov* 64(1):69-78 MAP REF

1967 420 C33

Culicidae, Czechoslovakia, Habitats, Population, Zoogeography.

7669-69

**THE SECOND INTERNATIONAL SYMPOSIUM OF CHIRONomid RESEARCH, HELSINKI 1967. (FR)**

E Palmen

*Ann Zool Fenn* 5(1):1-3

1968 410 AN712

Chironomidae, Insect biology, Symposia.

7670-69

**THE ORIGIN OF HETEROGENEITY IN NEWLY-HATCHED POPULATIONS OF THE MIGRATING GRASSHOPPER, SCHISTOCERCA GREGARIA FORSK. (GREGARIOUS PHASE). (FR)**

M Papillon

*Acad Sci Compt Rend Ser D Sci Nat* 268(16, 1ST SEMESTER):2136-2138

21 Apr 1969 505 P21

Insect physiology, Larvae, Polymorphism, Population, *Schistocerca gregaria*, Statistical analysis.

7671-69

**ON THE ECOLOGY OF ZYGOPTERAN DRAGONFLY POPULATIONS. (FR)**

M J Parr

*Entomologist (london)* 102(1272):114-116 REF

May 1969 421 EN8

Insect ecology, Odonata, Population.

7672-69

**APPLICATION OF THE EXPONENTIAL AND POWER FUNCTIONS TO THE STUDY OF ALLOMETRIC GROWTH, WITH PARTICULAR REFERENCE TO DORYLINE ANTS. (FR)**

B S Pasternack R R Gianutsos

*Amer Natur* 103(931, MAY-JUN):225-234 REF

30 Jun 1969 470 AM36

Formicidae, Insect physiology, Statistical analysis.

7673-69

**THE EFFECTS OF CERTAIN ELEMENTS ON THE HOST-PATHOGEN RELATIONSHIP OF**

## PLODIA INTERPUNCTELLA (HBN.) AND BACILLUS THURINGIENSIS VAR. THURINGIENSIS BERLINER. (FR)

J M Perron W A Smirnoff L Huot

Natur Can 95(3, MAY-JUN):785-792 REF

Jun 1968 410 N216

Bacillus thuringiensis, Bacterial diseases (insects), Insect nutrition, Plodia interpunctella. English abstract.

7674-69

## BAGWORM PHOTOGRAPHS: EGGS, LARVAE, PUPAE, AND ADULTS OF THYRIDOPTERYX EPHEMERAEOFORMIS (PSYCHIDAE: LEPIDOPTERA).

A Peterson

Fla Entomol 52(2):61-65

May 1969 420 F662

Insect behavior, Insect biology, Insect rearing, Photography, Thyridopteryx ephemeraeoformis, Trichogramma.

A series of photographs is shown, illustrating the various stages in the unusual life cycle of the bagworm Thyridopteryx ephemeraeoformis (Haworth) with special emphasis on eggs and their location, and on the structure and behavior of the females that may crawl out of pupae that have been removed from their bags. Notes are included on the use of single, clean bagworm eggs in rearing egg parasites, especially Trichogramma minutum Riley.

7675-69

## EFFECTS OF THE ELECTRICAL POLARIZATION OF THE SIXTH ABDOMINAL GANGLION OF THE COCKROACH (PERIPLANETA AMERICANA) ON THE ACTIVITY OF THE GIANT FIBERS. (FR)

Y Pichon J Boistel

Paris Soc Biol Compt Rend 160(8-9):1728-1732

04 Feb 1967 442.9 P21

Electrophysiology, Insect physiology, Nervous system, Periplaneta americana.

7676-69

## STUDY OF THE ISOLATED NERVE FIBRE OF INSECT. RECORD OF MEMBRANE AND ACTION POTENTIALS OF THE GIANT FIBRE OF THE COCKROACH, PERIPLANETA AMERICANA L. (FR)

Y Pichon J Boistel

Paris Soc Biol Compt Rend 160(10):1948-1954

REF

20 Feb 1967 442.9 P21

Bio-electric potential, Insect physiology, Nervous system, Periplaneta americana.

7677-69

## ASPECTS OF THE MORPHOGENESIS, IN ORGANOTYPICAL CULTURE IN VITRO, OF THE TRACHEAL SYSTEM IN DIPTERA CALIPHORIDAE. (FR)

J C Pihan

Acad Sci Compt Rend Ser D Sci Nat 268(16, 1ST SEMESTER):2074-2077 REF

21 Apr 1969 505 P21

Calliphora vicina, Hormones, Insect histology, Insect morphology, Insect physiology, Larvae, Phaenicia, Trachea.

7678-69

## LIFE HISTORY AND HABITS OF THE DOGWOOD BORER, THAMNOSPHECIA SCITULA (LEPIDOPTERA: AEGERIIDAE) IN TENNESSEE.

C D Pless W W Stanley

Tenn Acad Sci J 42(4):117-123

Oct 1967 500 T25A

Cornus, Insect behavior, Insect biology, Thamnosphecia.

7679-69

## DIELDRIN AND DDT: EFFECTS ON SPARROW HAWK EGGSHELLS AND REPRODUCTION.

R D Porter S N Wiemeyer

Science 165(3889):199-200 REF

11 Jul 1969 470 SCI2

Birds, Dieldrin, DDT, Eggs, Pesticides, Reproduction.

7680-69

## INFLUENCE OF CORPUS ALLATUM ON REPRODUCTION OF FEMALE IPHITA LIMBATA STAL (HEMIPTERA).

V K K Prabhu P I Ittycheria K K Nayar

Acta Ent Bohemoslov 64(5):335-343 REF

1967 420 C33

Blood, Corpora allata, Electrophoresis, Insect physiology, Iphita limbata, Reproduction.

7681-69

## THE ECOLOGY OF A NATURAL POPULATION OF QUEENSLAND FRUIT FLY, DACUS TRYONI. II. THE DISTRIBUTION OF EGGS AND ITS RELATION TO BEHAVIOR.

G Pritchard

Australian J Zool 17(2):293-311 REF

Apr 1969 410 AU73

Dacus tryoni, Insect behavior, Ovulation.

7682-69

## PRESENCE OF HAEMOCYANIN IN THE BLOOD OF A CENTIPEDE SCUTIGERA LONGICORNIS (CHILOPODA: MYRIAPODA).

G S Rajulu

Cur Sci 38(7):168-169

05 Apr 1969 475 SCI23

Biochemistry, Blood, Chilopoda, Hemocyanins.

7683-69

## EVIDENCE OF GOMORI NEGATIVE NEUROSECRETORY CELLS IN THE PARS INTERCEREBRALIS OF MUSCA DOMESTICA L. BY A COMPARATIVE STUDY USING AN ORDINARY MICROSCOPE AND AN ELECTRON MICROSCOPE. (FR)

F Ramade

Acad Sci Compt Rend Ser D Sci Nat 268(15, 1ST SEMESTER):1945-1947

14 Apr 1969 505 P21

Brain, Electron microscopy, Endocrine glands, Glands (insects), Insect histology, Insect physiology, Musca domestica, Nervous system, Secretion.

7684-69

## THE STOMODAEAL NERVOUS SYSTEM OF CYBISTER CONFUSUS SHP. (DYTISCIDAE: COLEOPTERA).

D R Ranade

Cur Sci 38(7):170-171

05 Apr 1969 475 SCI23

Development, Dytiscidae, Insect physiology, Intestines, Larvae, Nervous system.

7685-69

## OCCURRENCE OF D-SERINE IN ASEPTICALLY GROWN BOMBYX MORI.

D R Rao A H Ennor B Thorpe

Compar Biochem Physiol 21(3):709-711 REF

Jun 1967 444.8 C73

Bombyx mori, Germ-free life, Insect biochemistry, Isomers, Serine.

7686-69

## STUDIES ON THE ALLOSTERIC CONTROL OF AN ENZYME INVOLVED IN INSECT TANNING.

A Retnakaran

Compar Biochem Physiol 29(3):965-974 REF

Jun 1969 444.8 C73

Enzymes, Galleria mellonella, Insect metabolism, Radioactive tracers, Statistical analysis.

7687-69

## EFFECT OF 6-AZAURIDINE ON THE DEVELOPMENT OF THE OVARIES IN THE HOUSE FLY MUSCA DOMESTICA L. (DIPTERA).

B Rezabova V Landa

Acta Ent Bohemoslov 64(5):344-351 REF

1967 420 C33

Azauridine, 6-, Deoxyribonucleic acid, Insect biochemistry, Insect histology, Insect physiology, Musca domestica, Ovaries, Ribonucleic acid.

7688-69

## THE FEEDING HABITS OF HIGHER DIPTERAN LARVAE.

M J Roberts

Entomologist (london) 102(1272):99-106

May 1969 421 EN8

Diptera, Food habits, Insect behavior, Insect morphology, Larvae, Mouth parts.

7689-69

## PREDATORY BEHAVIOR OF ARGIOPE ARGENTATA (FABRICIUS).

M H Robinson

Amer Zool 9(1):161-173 REF

Feb 1969 410 AM3

Argiope argentata, Insect behavior, Insect physiology, Lepidoptera, Predaceous insects, Spider web, Spiders.

7690-69

## COMPARATIVE MODIFICATIONS OF THE FIGURATIVE PARTS OF THE HEMOLYMPH OF THE SAHARA SCORPION, ANDROCTONUS AUSTRALIS (L.) HECTOR C. L. KOCH, SUBJECTED EITHER TO ENVIRONMENTAL STRESSES OR TO EXPERIMENTAL IRRADIATIONS. (FR)

J Rodier J M Veillard C Grenot P Blanc P

Niaussat

Paris Mus Nat Hist Natur Bull 39(1, SER 2):197-204

21 Jul 1967 410.9 P213

Blood analysis, Environment, Gamma rays, Scorpionida, Stress.

7691-69

## A COMPARATIVE STUDY OF THE EMBRYONIC STAGES AT DIAPAUSE OF SOME SPECIES OF GRASSHOPPERS IN EAST TENNESSEE.

W G Russell

Tenn Acad Sci J 42(2):57-64

Apr 1967 500 T25A

Acrididae, Embryology, Insect physiology.

7692-69

## OBSERVATIONS OF ODONTOPLUS CALCEATUS (COLEOPTERA: CURCULIONIDAE), A LEAF MINER DAMAGING YELLOW-POPULAR.

W G Russell W W Stanley

Tenn Acad Sci J 42(3):93-96

Jul 1967 500 T25A

Insect behavior, Lirioceris tulipifera, Odontopus calceatus, Tree injuries.

7693-69

## ITALIAN CULICID VECTORS OF ARBOVIRUS. (IT)

G Sacca A Scirocchi M Balducci P Vcrani M C

Lopes

Parassitologia 10(2-3, OCT-DEC):195-201 REF

Dec 1968 436.8 P212

Aedes vexans, Arboviruses, Culex pipiens, Insect behavior, Insect vectors. English abstract.

7694-69

## VITAMIN A IN THE VISION OF TERMITES.

A Sannasi

Indian J Exp Biol 6(4):260- 261

Oct 1968 442.8 IN2

Insect biochemistry, Insect physiology, Odontotermes reedemanni, Termites, Vision, Vitamin a, Vitamin A aldehyde.

Vitamin A was identified in Termes reedemanni, which like retinene, is confined to the head and not the thorax or abdomen. Negatively phototactic forms before swarming have little vitamin A but in positively phototactic swarming forms vitamin A increases at the expense of retinene.

7695-69

## ELECTRICAL MEASUREMENTS ON CUTICLES EXCISED FROM ADULT MALE PERIPLANETA AMERICANA (L.).

P O Scheic T Smyth

Compar Biochem Physiol 21(3):547-571 REF

Jun 1967 444.8 C73

Bio-electric potential, Cuticle, Electrophysiology, Periplaneta americana.

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7696-69

## THE CARABID FAUNA OF THE HOHER VOGELSBERG NATURE CONSERVATION PARK. (GE)

H Scherf

*Entomol Bl* 64(3):130-156 MAP REF

15 Feb 1969 421 EN833

Carabidae, Germany, Insect ecology, Surveys, Zoogeography.

7697-69

## MOUNTAIN SYSTEMS AS CENTERS OF SPECIES FORMATION. (GE)

H Schweiger

*Deut Entomol Z* 16(1-3):159-174 MAP REF

01 May 1969 421 D48

Insect ecology, Insect evolution, Population.

7698-69

## LICE.

D A Siddiqui

*Sci Chronicle* 6(4, JUL-SEP):19-21

Jul 1968 Q1.S33

Animals, Anoplura, Cattle, Insecticides.

7699-69

## ON THE PREPARATION OF THE GENITALIA OF SHEPHERD SPIDERS. (GE)

V Silhavy

*Deut Entomol Z* 16(1-3):141-145

01 May 1969 421 D48

Extraction techniques, Insect physiology, Phalangida, Reproductive organs.

7700-69

## JUMPING AS DEFENSIVE BEHAVIOR IN COLLEMBOLA. (GE)

H R Simon

*Entomol Z* 79(10):110-112

16 May 1969 421 EN85

Collembola, Insect behavior, Insect protective devices.

7701-69

## ON THE PRACTICAL SIGNIFICANCE OF BIOLOGIC FEEDING INVESTIGATIONS OF PREDATORY COLEOPTERA. (GE)

R Simon

*Entomol Z* 79(1-2):7-10

15 Jan 1969 421 EN85

Coleoptera, Food habits, Predaceous insects.

7702-69

## WHOLE TOWN TREATMENT FOR FRUIT FLY CONTROL.

A H Skepper R Sweedman

*Agr Gaz New S Wales* 79(12):705-709

Dec 1968 23 N472

Attractants, Baits, Chemical control (insects), Costs, Spraying, Tephritidae.

7703-69

## CHIRONOMIDAE ECOLOGY IN THE UTSCHA RESERVOIR. (GE)

N Sokolowa

*Ann Zool Fenn* 5(1):139-143 REF

1968 410 AN712

Chironomidae, Insect ecology, Insect eggs, Insect morphology.

7704-69

## THE TERMINOLOGY OF THE PHENOMENA CONNECTED WITH THE WEATHER IN ECOLOGY. (FR)

A Sournia S Frontier

*Paris Mus Nat Hist Natur Bull* 39(5, SER

2):1001-1002

25 Apr 1968 410.9 P213

Ecology, Nomenclature, Weather.

7705-69

## QUALITATIVE ESTIMATION OF DIGESTIVE ENZYMES IN MIDGUT OF GRYLLODES SIGILLATUS WALKER.

R P Srivastava

*Beitr Entomol* 17(5-8):651-652

1967 421 B392

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Amylases, Glucosidase, alpha-, *Gryllodes sigillatus*, Insect biochemistry, Invertase, Lactase, Proteinases.

7706-69

## THE EVOLUTION AND SIGNIFICANCE OF THE EPIZOIC MODE OF LIFE IN CHIRONOMIDAE-LARVAE (DIPTERA). (GE)

A W Steffan

*Ann Zool Fenn* 5(1):144-150 REF

1968 410 AN712

Aquatic insects, Chironomidae, Diptera, Feeding habits (insects), Insect evolution, Larvac, Phoresy, Symbiosis.

7707-69

## MORPHOLOGICAL ADAPTATIONS OF THE HEAD AND MANDIBLES OF SOME COLEOPTEROUS LARVAE BURROWING SOLID SUBSTRATES (COLEOPTERA).

B R Striganova

*Beitr Entomol* 17(5-8):639-649 REF

1967 421 B392

Coleoptera, Head, Insect adaptation, Insect morphology, Larvae, Mouth parts.

7708-69

## A PECULIAR SWARMING MECHANISM OF AN ARCTIC CHIRONOMID (DIPTERA) AT SPITSBERGEN.

J Syrjamaki

*Ann Zool Fenn* 5(1):151-152

1968 410 AN712

Chironomidae, Insect behavior, Swarming.

7709-69

## BIOLOGY OF THE EUROPEAN CHAFER, *AMPHIMALLON MAJALIS* (COLEOPTERA: SCARABAEIDAE) IN NORTHEASTERN UNITED STATES.

H Tashiro G G Gyrisco F L Gambrell B J Fiori H Breitfeld

*N Y (state) Agr Exp Sta Bull* (828):71P REF

Jun 1969 100 N48 (2)

Amphimallon majalis, Attractants, Host plants, Insect biology, Insect diseases, Insect histology, Larvae, Microorganisms, Parasitism.

7710-69

## ELECTROPHORESIS AND IMMUNODIFFUSION OF PROTEINS FROM THE HEMOLYMPH OF THE LARGE MILKWEED BUG, *ONCOPELTUS FASCIATUS* (DALLAS) (HEMIPTERA, LYGAEIDAE).

M L Terando D Feir

*Compar Biochem Physiol* 20(2):431-436 REF

Feb 1967 444.8 C73

Blood, Electrophoresis, Immunochemistry, Oncopterus fasciatus, Proteins.

7711-69

## IMMUNOELECTROPHORESIS OF PROTEINS IN THE HEMOLYMPH OF THE LARGE MILKWEED BUG, *ONCOPELTUS FASCIATUS* (DALLAS).

M L Terando D Feir

*Compar Biochem Physiol* 21(1):31-38 REF

Apr 1967 444.8 C73

Blood, Electrophoresis, Insect biochemistry, Metamorphosis, Oncopeltus fasciatus, Proteins.

7712-69

## CONTRIBUTION TO THE STUDY OF THE LARVAL TRACHEATION OF THE EMPIDIDAE (DIPTERA, ORTHORRAPHIDAE): ITS INTEREST FROM THE PHYLOGENETIC AND ECOLOGICAL POINTS OF VIEW. (FR)

P Trehen

*Acad Sci Compt Rend Ser D Sci Nat* 268(15, 1ST SEMESTER):1965-1968

14 Apr 1969 505 P21

Development, Empididae, Insect adaptation, Insect ecology, Insect evolution, Insect morphology, Larvae, Trachea.

7713-69

## CHANGES TAKING PLACE IN THE RESPIRATORY EFFICIENCY OF ISOLATED FLIGHT MUSCLE SARCOMES, ASSOCIATED WITH

## THE AGE OF THE BLOWFLY, *CALLIPHORA ERYTHROCEPHALA*.

M A Tribe

*Compar Biochem Physiol* 23(2):607-619 REF

Nov 1967 444.8 C73

Aging, *Calliphora vicina*, Insect metabolism, Muscles, Respiration.

7714-69

## LOCOMOTOR ACTIVITY IN DROSOPHILA--V. A COMPARATIVE BIOCHEMICAL STUDY OF SELECTIVELY BRED POPULATIONS.

G Tunnicliff J T Rick K Connolly

*Compar Biochem Physiol* 29(3):1239-1245 REF

Jun 1969 444.8 C73

*Drosophila melanogaster*, Insect behavior, Insect biochemistry, Insect rearing, Population.

7715-69

## THE TOXIC EFFECT OF THREE ORGANOPHOSPHATE INSECTICIDES ON FEMALE *LEBISTES RETICULATUS* PETERS. (GE)

J Veger

*Cesk Spolecnosti Zool Vestnik* 31(1):88-95

Feb 1967 410.9 C33

Ekatin, Fish, Insecticides, Lebistes, Malathion, Organophosphorus compounds, Toxicology, Trichlorfon.

7716-69

## BLACK DISEASE OF BOMBUS HYPNORUM. PRELIMINARY COMMUNICATION. (GE)

R Wagner

*Hamburg Zool Staatsinst Zool Mus Entomol Mitt* 3(64):5-6

30 Apr 1969 421 H17

Black disease, *Bombus*, Insect diseases.

7717-69

## THE FINE STRUCTURE OF THE SPORES OF *NOSEMA APIS*. (GE)

W Wildfuhr W Fritzsch

*Angew Parasitol* 10(1):39-52 REF

Feb 1969 436.8 AN4

Cytology, Electron microscopy, *Nosema apis*, Spores. English and Russian abstracts.

7718-69

## A COMPARISON OF THE CARBOHYDRATE COMPOSITION OF THE HEMOLYMPH AND FAT BODY OF *PHORMIA REGINA* DURING LARVAL DEVELOPMENT.

L T Wimer

*Compar Biochem Physiol* 29(3):1055-1062 REF

Jun 1969 444.8 C73

Blood, Carbohydrates, Fat body, Insect biochemistry, Larvae, Metamorphosis, *Phormia regina*.

7719-69

## OVIPosition IN DDT RESISTANT AND SUSCEPTIBLE STRAINS OF *AEDES AEGYPTI* (L.) IN RELATION TO LIGHT PREFERENCE.

R J Wood

*Bull Entomol Res* 52(3):541-560, BIBL. 558-560, TABS.

Oct 1961 421 B87

*Aedes aegypti*, DDT, Lighting, Oviposition.

7720-69

## LABORATORY CULTURE OF CHIRONOMID SPECIES FROM THE HULA NATURE PRESERVE, ISRAEL.

D Wool J Kugler

*Ann Zool Fenn* 5(1):153-154

1968 410 AN712

Chironomidae, Insect cultures, Insect morphology, Insect rearing, Larvae.

7721-69

## OBSERVATIONS ON PHORESY IN LAMPROCHERNES NODOSUS (SCHRANK). (GE)

E Zielke

*Hamburg Zool Staatsinst Zool Mus Entomol Mitt* 3(64):1-3

30 Apr 1969 421 H17

Chernetidae, Diptera, Insect physiology, Phoresy.

7722-69  
 ON THE ABSENCE OF CIRCADIAN RHYTHMICITY IN DROSOPHILA PSEUDOOGSCURA PUPAE.  
 W F Zimmerman  
*Biol Bull* 136(3):494-500 REF  
 Jun 1969 442.8 B52  
 Diurnal rhythm, Drosophila pseudoobscura, Insect behavior, Light, Pupae, Temperature.

## GENETICS

7723-69  
 PATTERNS OF RIBONUCLEIC ACID SYNTHESIS IN SALIVARY GLANDS OF RHYNCHOSCIARA ANGELAE LARVAE DURING DEVELOPMENT.  
 H A Armelin R Meneghini F J S Lara  
*Genet Soc Amer Rec* 61(1,PT 2,SUPPL):351-360 REF  
 1969 442.9 G28  
 Cytogenetics, Development, Larvae, Rhynchosciara, Ribonucleic acid, Salivary glands (insects), Synthesis.

7724-69  
 PATTERNS OF PUFFING ACTIVITY IN THE SALIVARY GLAND CHROMOSOMES OF DROSOPHILA. I. AUTOSOMAL PUFFING PATTERNS IN A LABORATORY STOCK OF DROSOPHILA MELANOGLASTER.  
 M Ashburner  
*Chromosoma* 21(4):398-428 REF  
 06 Jun 1967 442.8 C46

Chromosomes, Drosophila melanogaster, Insect genetics, Metamorphosis, Molting (insects), Salivary glands (insects).

7725-69  
 SOME ASPECTS OF THE BOBBED PROBLEM IN DROSOPHILA.  
 K C Atwood  
*Genet Soc Amer Rec* 61(1,PT 2,SUPPL):319-327 REF  
 1969 442.9 G28  
 Drosophila melanogaster, Genes, Insect genetics, Ribosomes.

7726-69  
 GENETIC MARKERS IN THE BOLL WEEVIL.  
 A C Bartlett  
*J Hered* 58(4,JUL-AUG):159-162 REF  
 Aug 1967 442.8 AM3  
 Anthonomus grandis, Genes, Insect genetics, Insect morphology, Insect mutation.

7727-69  
 DEVELOPMENTAL CONTROL OF HETEROCHROMATIZATION IN COCCIDS.  
 S W Brown  
*Genet Soc Amer Rec* 61(1,PT 2,SUPPL):191-198 REF  
 1969 442.9 G28  
 Chromosomes, Coccidae, Development, Insect genetics.

7728-69  
 POLYTENE CHROMOSOMES OF OVARIAN NURSE CELLS OF THE GAMBIAE COMPLEX OF THE GENUS ANOPHELES. (IT)  
 M Coluzzi  
*Parassitologia* 10(2-3,OCT-DEC):179-183 REF  
 Dec 1968 436.8 P212  
 Anopheles gambiae, Chromosomes, Cytogenetics, Insect genetics, Meiosis, Ovaries. English abstract.

7729-69  
 CYTOGENETIC OBSERVATIONS ON SPECIES C OF THE ANOPHELES GAMBIAE COMPLEX.  
 M Coluzzi A Sabatini  
*Parassitologia* 10(2-3,OCT-DEC):155-165 REF  
 Dec 1968 436.8 P212  
 Anopheles gambiae, Chromosomes, Cytogenetics, Insect genetics.

7730-69  
 A NEW GENE ARRANGEMENT IN THE THIRD CHROMOSOME OF DROSOPHILA PSEUDOOGSCURA.  
 D W Crumpacker C D Kastritis  
*J Hered* 58(1,JAN-FEB):3-6  
 Feb 1967 442.8 AM3  
 Chromosomes, Drosophila pseudoobscura, Genes, Insect genetics.

7731-69  
 THE EFFECTS OF X-RAYS ON THE CHROMOSOMES OF LOCUST EMBRYOS. III. THE CHROMATID ABERRATION TYPES.  
 D P Fox  
*Chromosoma* 20(4):386-412 REF  
 16 Feb 1967 442.8 C46  
 Chromatin, Insect eggs, Insect genetics, Mutation, Schistocerca gregaria, X-rays.

7732-69  
 THE EFFECTS OF X-RAYS ON THE CHROMOSOMES OF LOCUST EMBRYOS. IV. DOSE-RESPONSE AND VARIATION IN SENSITIVITY OF THE CELL CYCLE FOR THE INDUCTION OF CHROMATID ABERRATIONS.  
 D P Fox  
*Chromosoma* 20(4):413-441 REF  
 16 Feb 1967 442.8 C46  
 Chromatin, Chromosomes, Dosage, Insect eggs, Insect genetics, Schistocerca gregaria, X-rays.

7733-69  
 CELL DIFFERENTIATION IN THE SALIVARY GLANDS OF CAMPTOCHIRONOMUS TENTANTS AND C. PALLIDIVITTATUS.  
 U Grossbach  
*Ann Zool Fenn* 5(1):37-40 REF  
 1968 410 AN712  
 Chironomidae, Chromosomes, Cytology, Insect genetics, Salivary glands (insects).

7734-69  
 MORPHOLOGICAL VARIABILITY OF THE CHROMOSOMAL FUNCTIONAL STRUCTURES IN THE SPERMATOCYTE NUCLEI OF DROSOPHILA SPECIES. (GE)  
 O Hess  
*Chromosoma* 21(4):429-445 REF  
 06 Jun 1967 442.8 C46

Cell nucleus, Chromosomes, Drosophila, Insect genetics, Insect morphology, Spermatocytes. English abstract.

7735-69  
 THE B-CHROMOSOME SYSTEM OF MYRMELEOTETTIX MACULATUS (THUNB.). III. THE STATISTICS.  
 G M Hewitt B John  
*Chromosoma* 21(2):140-162 MAP REF  
 21 Mar 1967 442.8 C46

Chromosomes, Insect genetics, Myrmeleotettix maculatus, Population, Rainfall, Statistical analysis, Temperature.

7736-69  
 ACTINOMYCIN D INDUCED CHROMOSOME BREAKAGE AND SUPPRESSION OF MEIOSIS IN THE LOCUST, SCHISTOCERA GREGARIA.  
 H K Jain U Singh  
*Chromosoma* 21(4):463-471 REF  
 06 Jun 1967 442.8 C46  
 Actinomycin d, Chromosomes, Insect genetics, Meiosis, Schistocerca gregaria.

7737-69  
 KARYOTYPE VARIATION IN DERMESTID BEETLES.  
 B John D D Shaw  
*Chromosoma* 20(4):371-385 REF  
 16 Feb 1967 442.8 C46  
 Chromosomes, Dermestidae, Insect genetics, Polymorphism.

7738-69  
 FUNCTIONAL STRUCTURES IN OOCYTE NUCLEI OF LOCUSTA MIGRATORIA. (GE)  
 W Kunz

*Chromosoma* 20(3):332-370 REF

27 Jan 1967 442.8 C46

Autoradiography, Cell nucleus, Chromosomes, Insect eggs, Locusta migratoria. English abstract.

7739-69

CYTOCHEMICAL INVESTIGATIONS ON PUFFS ISOLATED FROM SALIVARY GLAND CHROMOSOMES OF CHIRONOMUS. (GE)

M Lezzi

*Chromosoma* 21(1):89-108 REF

02 Mar 1967 442.8 C46

Chironomus tentans, Chromosomes, Insect biochemistry, Insect genetics, Salivary glands (insects). English abstract.

7740-69

AMPLIFICATION OF RIBOSOMAL CISTRONS IN THE HETEROCHROMATIN OF ACHETA.

A Lima-de-Faria M Birmstiel H Jaworska

*Genet Soc Amer Rec* 61(1,PT 2,SUPPL):145-159 REF

1969 442.9 G28

Acheta domesticus, Chromosomes, Deoxyribonucleic acid, Genes, Insect genetics, Ribosomes.

7741-69

HERITABILITY OF SPOT-NUMBER IN SCILLONIAN STRAINS OF THE MEADOW BROWN BUTTERFLY (MANiola JORTINA).

K McWhirter

*Heredity* 24(2):314-318

May 1969 443.8 H42

Inheritance, Insect genetics, Insect morphology, Maniola jurtina, Satyridae, Statistical analysis.

7742-69

COMPLEX SEX-DETERMINING MECHANISMS IN THREE SPECIES OF SOUTH AMERICAN GRASSHOPPERS (ORTHOPTERA, ACridoidea).

A Mesa R S de Mesa

*Chromosoma* 21(2):163-180 MAP REF

21 Mar 1967 442.8 C46

Acridoidea, Chromosomes, Insect genetics, Sex.

7743-69

THE STOCHASTIC SIMULATION OF TRIBOLIUM POPULATIONS.

B S Niven

*Physiol Zool* 40(1):67-82 REF

Jan 1967 410 P56

Insect genetics, Mathematical analysis, Population, Tribolium castaneum.

7744-69

PHASE TRANSFORMATION AND CHIASMA FORMATION IN LOCUSTS.

D J Nolte

*Chromosoma* 21(2):123-139 MAP REF

21 Mar 1967 442.8 C46

Chromosomes, Insect behavior, Insect genetics, Locusta migratoria migratorioides, Meiosis, Polymorphism.

7745-69

THE NUCLEOLAR DNA OF THREE SPECIES OF DROSOPHILA IN THE HYDEI COMPLEX.

O Olvera R

*Genet Soc Amer Rec* 61(1,PT 2,SUPPL):245-249

1969 442.9 G28

Cell nucleus, Deoxyribonucleic acid, Drosophila hydei, Insect genetics.

7746-69

HETEROZYGOUS PUFFS IN SCIARA OCELLARIS.

A L P Perondini E M Dessen

*Genet Soc Amer Rec* 61(1,PT 2,SUPPL):251-259 REF

1969 442.9 G28

Autoradiography, Chromosomes, Cytogenetics, Insect genetics, Polymorphism, Sciara.

7747-69

A MOLECULAR APPROACH TO THE STUDY OF GENIC HETEROZYGOSITY IN NATURAL

# ENTOMOLOGY

7748-69

## POPULATIONS, III. DIRECT EVIDENCE OF COADAPTATION IN GENE ARRANGEMENTS OF DROSOPHILA.

S Prakash R C Lewontin

*Nat Acad Sci Proc* 59(2):398-405 REF

Feb 1968 500 N21P

Drosophila, Electrophoresis, Enzymes, Insect evolution, Insect genetics.

7748-69

## THE POLYTENIC CHROMOSOMES OF THE BRISTLE FORMING CELL OF CALLIPHORA ERYTHROCEPHALA WITH SPECIAL CONSIDERATION ON THE SEX-LINKED HETEROZYGOUS STRUCTURE AND THE PUFF MODEL DURING METAMORPHOSIS. (GE)

D Ribbert

*Chromosoma* 21(3):296-344 REF

12 May 1967 442.8 C46

Calliphora vicina, Chromosomes, Insect genetics, Meiosis, Metamorphosis, Polyploidy. English abstract.

7749-69

## HERITABILITY OF PHOTOTACTIC AND GEOTACTIC RESPONSES IN DROSOPHILA PSEUDOBOBSCURA.

R C Richmond

*Amer Natur* 103(931, MAY-JUN):315-316

30 Jun 1969 470 AM36

Drosophila pseudoobscura, Geotropism, Insect behavior, Insect genetics, Phototropism.

7750-69

## EQUILIBRIUM VARIATIONS IN THE REDUNDANCY OF DNA IN DROSOPHILA MELANOGASTER.

F M Ritossa G Scala

*Genet Soc Amer Rec* 61(1,PT 2,SUPPL):305-317 REF

1969 442.9 G28

Drosophila melanogaster, Insect biochemistry, Insect genetics, Ribonucleic acid, Ribosomes.

7751-69

## NON REPLICATING DNA IN DROSOPHILA.

G T Rudkin

*Genet Soc Amer Rec* 61(1,PT 2,SUPPL):227-238 REF

1969 442.9 G28

Chromosomes, Cytogenetics, Deoxyribonucleic acid, Drosophila melanogaster, Spectrophotometry.

7752-69

## MUTANT TRAITS OF THE LARVAL AND PUPAL STADIA OF THE WAX MOTH.

T L Smith

*J Hered* 58(4,JUL-AUG):179-184

Aug 1967 442.8 AM3

Galleria mellonella, Insect genetics, Insect morphology, Insect mutation, Larvae, Pupae.

7753-69

## STUDIES IN AGING: IV. GENETIC CONTROL OF PIGMENT ACCUMULATION AND ITS BEARING ON THE ADULT LIFE SPAN IN DROSOPHILA MELANOGASTER.

K C Sondhi

*J Hered* 58(1,HJAN-FEB):47-52 REF

Feb 1967 442.8 AM3

Aging, Drosophila melanogaster, Insect genetics, Insect morphology, Longevity, Pigments (insect), Population.

7754-69

## STUDIES IN AGING, VI. GENES, DEVELOPMENTAL ENVIRONMENT, AND THE EXPRESSION OF AGING PROCESSES IN DROSOPHILA MELANOGASTER.

K C Sondhi

*Nat Acad Sci Proc* 59(3):785-791 REF

Mar 1968 500 N21P

Aging, Development, Drosophila melanogaster, Genes, Insect genetics.

# BIBLIOGRAPHY

7755-69

## PSEUDO-MULTIPLE FORMATION AS A CONSEQUENCE OF PROLONGED NON-HOMOLOGOUS CHROMOSOME ASSOCIATION IN METRIOPTERA BRACHYPTERA.

D I Southern

*Chromosoma* 21(3):272-284

12 May 1967 442.8 C46

Chromosomes, Insect genetics, Meiosis, Tetrigonidae.

7756-69

## MUTATION IN DROSOPHILA BY METHYLAZOXYMETHANOL, THE AGLYCONE OF CYCASIN.

H J Teas J G Dyson

*Soc Exp Biol Med Proc* 125(3):988-990

Jul 1967 442.9 SO1

Drosophila melanogaster, Insect genetics, Insect mutation, Mutagens.

7757-69

## INHERITANCE OF DDT RESISTANCE IN CULEX PIPiens FATIGANS WIEDEMANN.

V Thomas

*J Econ Entomol* 59(4):779-786

Aug 1966 421 J822

Culex pipiens quinquefasciatus, DDT, Heredity, Insecticide resistant insects.

7758-69

## HONEY BEE DRONES WITH JET BLACK BODIES.

K W Tucker H H Laidlaw

*J Hered* 58(4,JUL-AUG):184-185

Aug 1967 442.8 AM3

Apis mellifera, Cuticle, Insect genetics, Insect morphology, Pigments (insect).

7759-69

## SUPERNUMERARY CHROMOSOMES IN THE HUMAN BED BUG, CIMEX LECTULARIUS LINN. (CIMICIDAE: HEMIPTERA).

N Ueshima

*Chromosoma* 20(3):311-331 REF

27 Jan 1967 442.8 C46

Chromosomes, Cimex lectularius, Insect evolution, Insect genetics, Zoogeography.

# MEDICAL ENTOMOLOGY

7760-69

## SELECTIVE CONTROL OF SIMULIUM DAMNOSUM AND RIVER MANAGEMENT.

W E Kershaw

*Entomologist (london)* 102(1272):98

May 1969 421 EN8

Chemical control (insects), DDT, Human diseases, Insect vectors, Nematodes, Onchocerca volvulus, Simulium damnosum.

# CROP PROTECTION

7761-69

## DISEASE AND INSECT CONTROL; SPRAY SCHEDULES FOR THE CONTROL OF PESTS IN BACKYARD FRUITS.

B F Janson H Y Forsythe R L Miller B M Jones

G W Still

*Ohio State Univ Ext Leaflet (L-1, REV):8P*

Apr 1969 275.29 OH32EL

Carbamates, Chemical control (pests), Chemical control (plant diseases), Chlorinated hydrocarbons, Fruit, Pesticide safety, Spraying equipment.

7762-69

## 1968 VEGETABLE CROP INVESTIGATIONS IN SOUTHWEST KANSAS.

M T Jones

*Kan Agr Exp Sta Rep Progr* (143):22P

Mar 1969 100 K133P

Crop yields, Crops, Horticulture, Plant adaptation, Seeds, Vegetables.

7763-69

## TESTING OF FUNGICIDES AND INSECTICIDES 1967. (DA)

E Noddegaard T Hansen A N Rasmussen

*Tidsskr Plant* 72(3):273-321

1968 11 T439

Fungicides, Greenhouses, Insecticides, Plant nematodes, Plant protection, Seed treatment, Soil sterilization, Storage. English summary.

Results of annual testing of pesticides. Many pesticides, insects and fungus diseases are listed.

7764-69

## A NEW METHOD FOR CONTROLLING TREE SIZE.

F D Rauch J P Mahlstede

*Iowa Farm Sci* 23(11):7-8

May 1969 275.28 IO94

Chemicals, Trees. English summary.

# DISEASES

7765-69

## MEMORANDUM ON PLANT PATHOLOGY. (SP )

M G Alvarez

*Fitofilo* 21(57,JAN-MAR):23-32

Mar 1968 421 F55

Chemical control (plant diseases), Plant disease control, Plant disease resistance, Vegetables.

7766-69

## LOOSE SMUT OF OATS.

Anonymous

*Ag Gaz New S Wales* 80(2):BACK COVER

Feb 1969 23 N472

Fungus diseases (plants), Loose smut, Oats, Plant disease resistance, Ustilago hordei.

The most satisfactory method of controlling loose smut is by the use of resistant or tolerant oat varieties such as Acacia, Avon, Ballidu, Bundy, Garry, Kent, Mugga, Belah, Coolibah, Dale, and Fulmark.

7767-69

## BLACKLEG OF CABBAGE, CAULIFLOWER AND RELATED PLANTS. (LEPTOSPHAERIA MACULANS).

Anonymous

*Ag Gaz New S Wales* 80(9):BACK COVER

Apr 1969 23 N472

Blackleg, Cabbage, Cauliflower, Cultural control (plant diseases), Fungus diseases (plants), Leptosphaeria.

7768-69

## STRUCTURES DERIVED FROM COWPEA CHLOROTIC MOTTLE AND BROME MOSAIC VIRUS PROTEIN.

J B Bancroft C E Bracker G W Wagner

*Virology* 38(2):324-335 REF

Jun 1969 448.8 V81

Bromus, Cowpeas, Mosaic, Mottle (cowpeas), Proteins, Viruses. English summary.

7769-69

## INTENSIVE FIELD COMPARISON OF FUNGICIDES FOR APPLE MILDEW CONTROL.

M Bennett M H Moore

*East Malling Res Sta Annu Rep* (A51):145-150

1968 103 EA7

Apples, Binapacryl, Chemical control (plant diseases), Fungicides, Lime, Methyl-2,3-quinolinedithiol cyclic carbonate, 6-, Podosphaera leucotricha, Sulfur.

7770-69

## PYTHOPHTHORA CINNAMOMI RANKS ON CONIFERS IN NEW SOUTH WALES.

A L Bertus

*Ag Gaz New S Wales* 79(12):751-754

Dec 1968 23 N472

Conifers, Fungus diseases (plants), Phytophthora cinnamomi, Plant disease resistance, Root rot.

7771-69

#### CONTROL OF ANTHRACNOSE OF GRAPES IN THE TRANSVAAL.

B H Boeema

*S Afr J Agr Sci* 11(3):567-574 REF

Sep 1968 24 SU3

Anthracnose, Copper compounds, Elsinoe ampelinum, Folpet, Fungicides, Fungus diseases (plants), Grapes, Mildew (plants), Uncinula necator.

Both organic and copper fungicides gave satisfactory control of anthracnose of grapes (*Sphaceloma ampelinum*) in field trials conducted at the Horticultural Research Institute, Pretoria. The copper fungicides were phytotoxic, the fixed copers more so than homemade Bordeaux mixture. Most of the organic fungicides encouraged the development of mildew (*Oidium tuckeri*). Folpet was the only fungicide that, in controlling anthracnose, did not encourage mildew; it was not phytotoxic.

7772-69

#### DISEASE RESISTANCE BREEDING.

R D Brock

*Australian Inst Agr Sci J* 33(2):72-76 REF

Jun 1967 23 AU74

Plant breeding, Plant disease resistance, Plant diseases, Plant genetics, Potatoes, Tobacco, Wheat.

7773-69

#### PHYTOPHTHORA INFESTANS SPORANGIAL GERMINATION AND TUBER ROT REDUCED BY SOIL RESIDUES OF FUNGICIDES.

R C Cetas S S Leach

*Amer Potato J* 46(5):174,178, 182

May 1969 75.8 P842

Difolatan, Fungicides, Late blight (potatoes), Phytophthora infestans, Seed germination, Soil treatment, Soils.

7774-69

#### TESTING CHERRY ROOTSTOCKS FOR RESISTANCE TO INFECTION BY RASPBERRY RINGSPOT AND CHERRY LEAF ROLL VIRUSES.

R. Cropley

*East Malling Res Sta Annu Rep (A51):141-143*

REF

1968 103 EA7

Cherries, Crop varieties, Leaf roll, Plant breeding, Plant disease resistance, Ring spot, Virus diseases (plants).

7775-69

#### THE UREDINALES ON MEXICAN GRAMINEAE.

G B Cummins

*Southwest Natur* 12(1):70-86

20 Apr 1967 409.6 SO8

Fungus diseases (plants), Grasses, Taxonomy, Uredinales.

7776-69

#### SCREENING OF INDIAN PLANTS FOR BIOLOGICAL ACTIVITY: PART I.

M L Dhar M M Dhar B N Dhawan Mehrotra C Ray

*Indian J Exp Biol* 6(4):232-247 REF

Oct 1968 442.8 IN2

Biological assay, Drug plants, Plant extracts.

Two hundred and eighty-five botanically identified plant materials have been extracted with 50 per cent ethanol and put through a wide biological screen of 61 tests. These include tests for antibacterial, antifungal, antiviral, antihelminthic, antiprotozoal, anticancer, antifertility, hypoglycaemic and a wide range of pharmacological activities.

7777-69

#### ROOT ROT OF YOUNG MAIZE PLANTS--THE CASUAL FUNGI.

J J Du Toit

*S Afr J Agr Sci* 11(3):595-604 REF

Sep 1968 24 SU3

Corn, Fungus diseases (plants), Fusarium moniliforme, Fusarium oxysporum, *Helminthosporium*, Pathogenicity, Root rot.

7778-69

#### BACTERIAL SPOT OF IVY CAUSED BY XANTHOMONAS HEDERAEE (ARNAUD, 1920) DOWSON, 1939, IN NEW ZEALAND.

D W Dye

*New Zealand J Sci* 10(2):481-485

Jun 1967 514 N482

Bacterial diseases (plants), Hedera, Xanthomonas.

Bacterial spot of ivy caused by the organism *Xanthomonas hederae* is recorded in New Zealand for the first time. The symptoms consist of large circular to angular leaf lesions frequently surrounded by chlorotic areas, leaf wilting and defoliation.

7779-69

#### THE BASES OF DEFFERENTIATING SCLEROSPORA PHILIPPINENSIS WESTON AS A SPECIES DISTINCT FROM SCLEROSPORA SACCHARI MIYAKE.

F A Elazegui O R Exconde

*Philippine Agr* 51(10):767-778

Mar 1968 25 P542

Biology, Corn, Fungus diseases (plants), Sclerospora, Sugarcane, Taxonomy.

7780-69

#### FUNGAL ROOT ROTS, LEAF SPOTS AND BOLL ROT OF COTTON IN THE ORD VALLEY, NORTH WESTERN AUSTRALIA.

J P Evenson R Doepl

*Empire Cotton Growing Rev* 46(1):49-52 REF

Jan 1969 72.8 EM7

Boll rot (cotton), Cotton, Fungus diseases (plants), Leaf spot, Root rot.

7781-69

#### BACTERIA ASSOCIATED WITH FROST-DAMAGED APPLE BLOSSOMS.

C M E Garrett

*East Malling Res Sta Annu Rep (A51):139-140*

1968 103 EA7

Apples, Bacterial diseases (plants), Frost, Pears, Pseudomonas.

7782-69

#### UTILIZATION OF OLIGOSACCHARIDES BY TWO PATHOGENIC ISOLATES OF COLLETOTRICHUM DEMATIUM.

A K Ghosh

*Lloydia* 30(3):280-283

Sep 1967 442.8 L77

Colletotrichum dematium, Fungus diseases (plants), Oligosaccharides, Plant metabolism.

7783-69

#### THE INFLUENCE OF SOIL CONDITIONS ON DEVELOPMENT OF RHIZOCTONIA SOLANI, KUHN, ON TOBACCO.

W F T Hartill

*Rhodesia J Agr Res* 6(2):77-79

1968 24 R3472 (1)

Chemical control (plant diseases), Chlorinated hydrocarbons, Fungus diseases (plants), Meloidogyne incognita, Meloidogyne javanica, Methyl bromide, Rhizoctonia solani, Soil fumigation, Soil moisture, Tobacco.

7784-69

#### PLANT ANALYSES UNCOVER HIDDEN HUNGER IN INDIANA.

E L Hood

*Better Crops Plant Food* 43(1):19

1969 6 B46

Alfalfa, Boron, Corn, Crops, Limestone, Manganese, Nitrogen, Plant analysis, Potassium, Soybeans.

7785-69

#### FIRE AS AN AGENT IN THE ESTABLISHMENT OF A PLANT DISEASE.

M Jalaluddin

*Pakistan J Sci* 20(1-2 JAN-MAR):42-44

Mar 1968 475 P172

Air-borne plant diseases, Coniferae, Fires, Plant disease transmission, Plant physiology, Rhizina inflata.

The heating of soil around fires where very little ash is deposited often increases the number of fruitifications of Rhizina, the agent of group dying of conifers, in the area, from which wind can carry spores to the burned area. The life cycle and growth experiments in soils from fire sites are discussed.

7786-69

#### THE EFFECTS OF SOME SOIL-BORNE FUNGI ON THE SEX RATIO OF HETERODERA ROSTOCHIENSIS ON TOMATO.

V Ketudat

*Nematologica* 15(2):229-233 REF

May 1969 436.8 N342

Fungus diseases (plants), Heterodera rostochiensis, Population, Rhizoctonia solani, Sex, Soil-borne plant diseases, Tomatoes, Verticillium albo-atrum.

7787-69

#### SOME OBSERVATIONS OF PEA ENATION MOSAIC VIRUS ISOLATED IN SLOVAKIA. (CZ)

B A Kvicala

*Biologia (bratislava)* 22(10):738-750 REF

1967 442.8 B5265

Acyrthosiphon pisum, Host indexing (plants), Insect vectors, Mosaic, Peas, Virus diseases (plants). English and Russian abstracts.

7788-69

#### TRANSMISSION OF PEA LEAF ROLLING VIRUS BY APHIDS.

B A Kvicala M Musil

*Biologia (bratislava)* 22(1):10-15

1967 442.8 B5265

Acyrthosiphon pisum, Aphis craccivora, Aphis fabae, Insect vectors, Leaf roll, Myzus persicae, Peas, Plant disease transmission, Virus diseases (plants).

7789-69

#### DIFFERENCE IN THE TRANSMISSION OF PEA LEAF ROLLING VIRUS BY TWO STRAINS OF PEA APHID ACYRTHOSIPHON PISUM HARIS.

B A Kvicala

*Biologia (bratislava)* 22(11):803-807 REF

1967 442.8 B5265

Acyrthosiphon pisum, Insect vectors, Leaf roll, Peas, Plant disease transmission, Virus diseases (plants).

7790-69

#### VECTOR-VIRUS RELATIONSHIP OF TWO LESS KNOWN APHID VECTORS OF PEA MOSAIC VIRUS.

B A Kvicala

*Biologia (bratislava)* 22(8):566-571 REF

1967 442.8 B5265

Brachycaudus helichrysi, Cryptomyzus ribis, Insect vectors, Mosaic, Peas, Plant disease transmission, Virus diseases (plants).

7791-69

#### SELF-CONSTRUCTION OF RNA EXTRACTS OF THREE DIFFERENT VIRUSES AND OF THE PROTEIN SUB-UNITS OF THE LUCERNE (ALFALFA) MOSAIC VIRUS. (FR)

G Lebeurier M Wurtz L Hirth

*Acad Sci Compt Rend Ser D Sci Nat* 268(15, 1ST SEMESTER):2002-2005

14 Apr 1969 505 P21

Alfalfa, Biochemistry, Mosaic, Proteins, Ribonucleic acid, Virus diseases (plants).

7792-69

#### THE PROTEIN SUBUNIT OF THE SATELLITE TOBACCO NECROSIS VIRUS.

J Lesnaw M E Reichmann

*Virology* 38(2):368-369

Jun 1969 448.8 V81

Necrosis, Proteins, Tobacco, Viruses.

7793-69

**NUCLEAR CHANGES IN MESOPHYLL CELLS OF GOMPHRENA GLOBOSA L. ASSOCIATED WITH INFECTION BY BEET MOSAIC VIRUS.**

G P Martelli M Russo

*Virology* 38(2):297-308 REF

Jun 1969 448.8 V81

Beets, Gomphrena globosa, Mosaic, Viruses. English summary.

7794-69

**TOXIC METABOLITES PRODUCED BY FUNGI IMPLICATED IN MYCOTOXICOSES.**

C J Mirocha C M Christensen G H Nelson

*Biotechnol Bioeng* 10(4):469-471

Jul 1968 381 J822

Fungi, Metabolites, Mycotoxicosis, Toxicology. English summary.

7795-69

**A FIELD COMPARISON OF FUNGICIDES AS MEDIUM VOLUME SPRAYS ON APPLES.**

M H Moore M Bennett

*East Malling Res Sta Annu Rep* (A51):151-157

1968 103 EA7

Apples, Captan, Dinocap, Dodine, Fungicides, Fungus diseases (plants), Phenylmercuric compounds, Podosphaera leucotricha, Venturia inaequalis.

7796-69

**COINCIDENCE AND INCIDENCE OF ENTOMOPHTHORA FLORIDANA WITH AND IN EUTETRANYCHUS BANKSI IN FLORIDA CITRUS GROVES.**

M H Muma

*Fla Entomol* 52(2):107-112

May 1969 420 F662

Biological control (insects), Citrus, Entomogenous fungi, Entomophthora, Eutetranychus banksi, Surveys.

7797-69

**A PRELIMINARY STUDY ON THE EFFECT OF IRRADIATION ON GRAIN SMUT OF JOWAR.**

S Nargis A Kafi

*Pakistan J Sci* 20(1-2, JAN-MAR):31-33 REF

Mar 1968 475 P172

Fungus diseases (plants), Gamma rays, Sorghum, Sphacelotheca sorghi, Spore germination.

Chlamydospores of grain smut of sorghum (Sphacelotheca sorghi) exposed to different doses of gamma rays from an 1800 Co 60 source revealed that at 200 Kr. the germination of spores was reduced by more than 50 per cent and was completely inhibited at 500 Kr. Sorghum seeds were not affected up to 200 Kr. but the seed germination was reduced to 50 per cent at 500 Kr..

7798-69

**YIELD EXPERIMENTS WITH POTATO VIRUS S-FREE AND POTATO VIRUS S-INFECTED BINTJE POTATOES. (DA)**

P W Nielsen

*Tidskr Plant* 72(3):367-368

1968 11 T439

Crop losses, Potatoes, Virus diseases (plants), Virus s. English summary.

7799-69

**TOXINS IN PLANT DISEASE: STRUCTURE AND MODE OF ACTION.**

L D Owens

*Science* 165(3888):18-25 REF

04 Jul 1969 470 SCI2

Enzymes, Plant diseases, Toxicology.

7800-69

**STUDIES OF THE DEVELOPMENT OF POWDERY MILDEW (ERYSIPHE GRAMINIS F. SP. HORDEI MARCHAL) ON BARLEY. I. CONIDIA GERMINATION.**

C Paulech

*Biotologia (bratislava)* 22(10):721-730 REF

1967 442.8 B5265

Barley, Crop varieties, Erysiphe graminis hordei, Fungus diseases (plants), Powdery mildew, Spore germination.

7801-69

**THERMODYNAMIC STATE OF THE WATER IN HEALTHY OR INFECTED GRAINS OF WHEAT. (FR)**

J Pelhate

*Ann Technol Agr* 17(3):227-236 REF

1968 14 F8499AN

Aspergillus, Fungus diseases (plants), Penicillium, Plant physiology, Storage, Water, Wheat. English, Spanish and Italian summaries.

7802-69

**INTRACELLULAR INCLUSIONS IN EPIDERMAL CELLS OF TOBACCO INFECTED BY TOBACCO RATTLE VIRUS.**

B Plavsic-Banjac Z Polak

*Biol Plant* 11(3):245-247

1969 450 B52

Inclusion bodies, Plant cytology, Rattle disease, Tobacco, Virus diseases (plants).

Internal symptoms in epidermal cells of rattle virus infected tobacco were investigated. Ring-, elipsoid-, and spindle-shaped inclusions were found in the period between the fourth and thirtieth day after inoculation of Samsun seedlings.

7803-69

**GENUS CANDIDA BERKHOUT. IX. CONTINUOUS CULTIVATION OF CANDIDA ALBICANS.**

M Pokorna A Kockova-Kratochvilova V Stuchlik L Hronská

*Folia Microbiol* 12(5):447-457 REF

1967 448.3 C332

Candida albicans, Culture media, Statistical analysis, Tissue culture.

7804-69

**TOLERANCE OF VIRUS INFECTION IN CROP PLANTS.**

A F Posnette

*Rev Appl Mycol* 48(3):113-118 REF

Mar 1969 405 R328

Bibliography, Crop varieties, Crop yields, Field crops, Nomenclature, Plant breeding, Plant disease resistance, Virus diseases (plants).

7805-69

**WITHERING OF CITRUS TREES. (POR)**

V Rossetti

*Biologico* 35(2):31-35

Feb 1969 442.8 B529

Citrus, Insect control, Insect vectors, Nematode vectors, Virus diseases (plants).

7806-69

**THIN LAYER CHROMATOGRAPHICAL STUDIES ON PHENOLIC MARKERS OF THE GREENING VIRUS IN VARIOUS CITRUS SPECIES.**

R E Schwarz

*S Afr J Agr Sci* 11(4):797-802

Dec 1968 24 SU3

Biochemistry, Chromatography, Citrus, Diagnosis, Greening disease, Virus diseases (plants).

7807-69

**MUTAGENIC EFFECTS OF ETHYL METHANESULFONATE ON RICE SEEDS.**

J D Soriano

*Natur Appl Sci Bul* 20(3, JUL-SEP):237-247 REF

Jul 1967 475 P532

Deoxyribonucleic acid, Ethyl methanesulfonate, Fertility, Mutation, Radiation, Rice, Seed planting, Seedlings.

7808-69

**PECTOLYTIC ACTIVITY OF PHYTOPATHOGENIC XANTHOMONADS.**

M P Starr S Nasuno

*J Gen Microbiol* 46(3):425-433 REF

Mar 1967 448.3 J823

Biochemistry, Pectolytic enzymes, Xanthomonas.

7809-69

**STUDIES ON THE ANTIGENIC ACTIVITIES OF YEAST. III. ISOLATION AND INHIBITION ASSAY OF THE OLIGOSACCHARIDES FROM ACID-HYDROLYSATE OF MANNAN OF CANDIDA ALBICANS.**

S Suzuki H Sunayama

*Jap J Microbiol* 13(1):95-101

Mar 1969 448.8 J273

Antigens, Biological assay, Candida albicans, Metabolism, Oligosaccharides.

7810-69

**LINEAR VARIATION IN STABILITY OF TOBACCO MOSAIC VIRUS TO STRIPPING OF PROTEIN BY DETERGENT.**

J Symington

*Virology* 38(2):309-316

Jun 1969 448.8 V81

Mosaic, Proteins, Tobacco, Virus diseases (plants). English summary.

7811-69

**EXPOSURE OF RIBONUCLEIC ACID AT BOTH ENDS OF TOBACCO MOSAIC VIRUS BY EXTENSIVE PROTEIN STRIPPING.**

J Symington

*Virology* 38(2):317-323 REF

Jun 1969 448.8 V81

Mosaic, Proteins, Ribonucleic acid, Tobacco. English summary.

7812-69

**PERFORMANCE OF SWEETCORN UNDER NATURAL EPIPHYTIC OF MAIZE DWARF MOSAIC VIRUS.**

R W Toler A J Bockholt

*Tex Agr Exp Sta Progr Rep* (2648):3P

Jan 1969 100 T31P (2)

Crop varieties, Disease transmission, Dwarf mosaic, Insect vectors, Rhopalosiphum maidis, Sorghum halepense, Sweetcorn, Virus diseases (plants).

7813-69

**THE RELATIVE INFLUENCE OF CHEMICAL AND PHYSICAL PROPERTIES ON THE FUNGICIDALITY OF TETRACHLOROISOPHTHALONITRILE AND SOME OF ITS ANALOGUES.**

N J Turner R D Battershell

*Boyce Thompson Inst Contrib* 24(6, JAN-MAR):139-147 REF

Mar 1969 451 B69

Alternaria solani, Chemical control (plant diseases), Chemistry, Fungicides, Fungus diseases (plants), Isophthalonitrile, halogenated, Monilinia fructicola, Regression analysis.

Fungicidal activity of a series of halogenated isophthalonitriles was correlated with chemical reactivity, oil/water partition coefficients and vapor pressure. The most effective member of the series was tetrachloroisophthalonitrile, a broad spectrum foliage fungicide. Using the methods of regression analysis to correlate biological activity with chemical parameters, a positive relationship was found between fungicidal activity and the reactivity of the compounds with a model thiol compound. This suggests that the mode of action of these compounds involves reaction with thiol groups.

7814-69

**MECHANICAL CONTROL OF LODGING IN RICE AND EXTENT OF REDUCTION IN YIELD DUE TO TOPPING.**

S K C Vcrma

*Madras Agr J* 56(1):32-33

Jan 1969 22 M262

Crop yields, Cultural control (plant diseases), Lodging, Plant physiological diseases, Rice.

7815-69

**SEED TREATMENT. SIMPLE AND CHEAP METHOD OF CONTROLLING DISEASES.**

D Vir

*Indian Farming* 18(8):23-24

Nov 1968 22 IN283

Chemical control (plant diseases), Crop losses, Fungicides, Fungus diseases (plants), Mercury compounds, Organic compounds, Seed treatment, Seed-borne plant diseases.

## 7816-69

## THE EFFECT OF THE BARLEY YELLOW DWARF VIRUS DISEASE ON BARLEY AND OATS IN THE WESTERN CAPE.

M B von Wechmar V D Wassermann  
*S Afr J Agr Sci* 11(4):757-768 REF  
Dec 1968 24 SU3

Barley, Crop losses, Crop varieties, Insect vectors, Oats, Rhopalosiphum padi, Virus diseases (plants), Yellow dwarf.

In controlled field experiments it was demonstrated for the first time that barley yellow dwarf virus (BYDV) could be an important factor limiting the yield of barley and oats in the Western Cape Province. The virus, successfully transmitted by the aphid Rhopalosiphum padi (L.), caused typical symptoms and severe yield reductions in both barley and oats, particularly when sown fairly early. Differences in cultivar susceptibility were demonstrated.

## ARTHROPODS

## 7817-69

## TWENTY-SECOND ANNUAL CONFERENCE REPORT ON COTTON INSECT RESEARCH AND CONTROL, NEW ORLEANS. 1969.

92P MAP  
Feb 1969 1.967 A2C76

Biological control (insects), Chemical control (insects), Cotton, Cultural control (insects), Defoliants, Insect pests, Insecticide resistant insects, Insecticides, Reports, Research, Surveys.

## 7818-69

## 1969 CRANBERRY INSECT AND DISEASE CONTROL CHART.

Anonymous

1P

1969 275.29 M381I

Accident prevention, Chemical control (pests), Chemical control (plant diseases), Cranberries, Insect pests, Pesticides.

## 7819-69

## MEALYBUGS.

Anonymous

*Agr Gaz New S Wales* 80(4):220-222

Apr 1969 23 N472

Carbophenothion, Chemical control (insects), Chlordane, Diazinon, Dieldrin, Insect biology, Insecticides, Methyl demeton, Pseudococcidae.

## 7820-69

## A FIRST RECORD OF FRUIT-PIERCING NOCTUID MOTHS IN EUROPE.

H Banziger

*Naturwissenschaften* 56(4):218

Apr 1969 474 N213

Feeding, Figs, Fruit, Insect behavior, Insect nutrition, Insect pests, Noctuidae.

## 7821-69

## CONTROL OF A SPRUCE BUDWORM OUTBREAK IN QUEBEC THROUGH AERIAL SPRAYING OPERATIONS.

J R Blais

*Can Entomol* 95(8):821-827, BIBL. 826-827

Aug 1963 421 C16

Aerial spraying, Choristoneura fumiferana, DDT, Forest insects, Quebec.

## 7822-69

## NEW PESTS OF SUGARCANE IN MEXICO (SACCHARIDSYDNE SACCHARIVORA WESTW.). (SP.)

S F Caceres

*Fitofilo* 21(57, JAN-MAR):33-42

Mar 1968 421 F55

Benzene hexachloride, Delphacidae, Insect biology, Sugarcane, Zoogeography.

## 7823-69

## LABORATORY DETERMINATION OF RESISTANCE TO TETRADIFON IN THE FRUIT TREE RED SPIDER MITE, PANONYCHUS ULMII (KOCH).

J E Cranham

*East Malling Res Sta Annu Rep* (A51):165-168  
1968 103 EA7

Acaricides, Chemical control (insects), Insect eggs, Insect rearing, Panonychus ulmi, Sulfides, Tetradifon, Tetrasul.

## 7824-69

## MERIDMYZA NIGRIVENTRIS (DIPTERA, CHLOROPIDAE): ITS SYSTEMATIC STATUS, DEVELOPMENT AND HARMFUL ACTIVITY. (RUS)

L I Fedoseeva

*Zool Zhur* 48(5):701-708 REF  
May 1969 410 R92

Chloropidae, Crop losses, Grain, Insect taxonomy. English abstract.

## 7825-69

## THE BROAD MITE: HEMITARSONEMUS LATUS (BANKS) (ACARINA: TARSONEMIDAE).

J G Gellatley

*Agr Gaz New S Wales* 80(2):96-97  
Feb 1969 23 N472

Beets, Chemical control (pests), Chlorinated hydrocarbons, Citrus, Dicofol, Endrin, Ethion, Hemitarsonemus latus, Host plants, Methyl demeton, Organophosphorus compounds, Sulfur compounds.

## 7826-69

## PEAR PSYLLA CONTROL STUDIES.

E H Glass

*N Y (state) Agr Exp Sta Res Circ* (16):10P  
Apr 1969 100 N48R

Chemical control (insects), Chlorinated hydrocarbons, Dichloro-2,2-bis(p-ethylphenyl)ethane, 1,1-Endosulfan, Insecticide resistant insects, Morestan, Organophosphorus compounds, Pears, Psylla pyricola.

Other insecticides mentioned but less effective are malathion, Guthion, Imidan, Zolone, carbaryl, and Furadan.

## 7827-69

## A PRELIMINARY SURVEY OF THE RELATIONSHIPS BETWEEN THE SOIL FAUNA AND THE ROOTS OF FRUIT TREES.

D J L Harding

*East Malling Res Sta Annu Rep* (A51):169-172  
1968 103 EA7

Collembola, Fruit, Insect ecology, Mites, Roots, Soil fauna, Surveys, Symphyla.

## 7828-69

## 1969 RECOMMENDATIONS FOR INSECT CONTROL ON COMMERCIAL VEGETABLE CROPS.

W C Harding D Shriver M Tysowsky

*Md Univ Ext Plant Pathol Mimeo* (199):11P  
Jan 1969 275.29 M363

Accident prevention, Chemical control (insects), Insect pests, Insecticides, Vegetables.

## 7829-69

## OCCURRENCE OF BEMISIA TABACI (GENN.) IN THE FIELD AND ITS RELATION TO THE LEAF CURL DISEASE OF TOBACCO.

B G Hill

*S Afr J Agr Sci* 11(3):583-594 REF

Sep 1968 24 SU3

Bemisia tabaci, Insect vectors, Leaf curl, Surveys, Tobacco, Virus diseases (plants).

## 7830-69

## CONTROL OF TEXAS CITRUS MITE WITH NEW ACARICIDES.

R B Johnson

*Fla Entomol* 52(2):73-77

May 1969 420 F662

Acaricides, Chemical control (insects), Eutetranychus banksi, Insect control, Oranges.

Seventeen acaricides were tested against Texas citrus mite, Eutetranychus banksi, (McG.) in two experiments conducted on young 'Valencia' orange trees. The standard acaricides dicofol, oil, carbophenothion, and ethion were less effective than other experimental acaricides tested.

## 7831-69

## ABSCISSION OF COTTON FLOWER BUDS AND PETIOLES CAUSED BY PROTEIN FROM BOLL WEEVIL LARVAE.

E E King H C Lane

*Plant Physiol* 44(6):903-906

Jun 1969 450 P692

Abscission, Anthonomus grandis, Cotton, Larvae, Plant injuries, Proteins, Tissue extracts.

Protein extracted from boll weevil larvae caused abscission of cotton flower buds and debladed petioles. Abscission of buds is preceded by a rapid and persistent flaring of bracts; cell proliferation is induced in the abscission zone of debladed petioles. A possible mode of transmission of the agent from larva to bud tissue is discussed.

## 7832-69

## ON THE DISTRIBUTION OF THE INFESTATION OF THE CABBAGE GALLNAT DASINEURA BRASSICAE, IN LARGE FIELDS. (GE)

W Kuhne

*Beitr Entomol* 17(1-2):287-297 REF

1967 421 B392

Cecidomyiidae, Cultural control (insects), Dasineura brassicae, Population, Rape. English and Russian abstracts.

## 7833-69

## THE GRASS STUNT MITE, ACERIA NEOCYNODONIS KEIFER IN SOUTH AFRICA.

M K P Meyer

*S Afr J Agr Sci* 11(4):803-804

Dec 1968 24 SU3

Aceria neocynodonis, Cultural control (insects), Cynodon, Plant injuries.

## 7834-69

## THE CONTROL OF ERNOBIUS MOLLIS LINNAEUS (COLEOPTERA: ANOBIIDAE) WITH DIELDRIN DIPS.

R H Milligan

*New Zealand J Sci* 10(4):1012-1019

Dec 1967 514 N482

Anobiidae, Chemical control (insects), Chlorinated hydrocarbons, Dieldrin, Insect behavior, Oviposition, Pseudotsuga menziesii.

Dip treatment of test billets with an emulsion containing 0.1 per cent dieldrin prevented oviposition by Ernobius mollis. Eggs were laid on billets treated with 0.05 per cent or lower; all first instar larvae were killed when the surfaces were pre-treated with 0.005 per cent or higher concentration. Dieldrin films did not repel ovipositing females but adult mortality resulted in fewer eggs being laid on billets dipped in 0.005 per cent or higher concentrations, than were laid on controls.

## 7835-69

## AN OBSERVATION ON THE BASIC QUESTION OF THE RELIABILITY OF THE EFFICIENCY AND PERFORMANCE OF NATURAL ENEMIES AGAINST DESTRUCTIVE INSECTS. (GE)

G Morge

*Beitr Entomol* 17(1-2):225-233

1967 421 B392

Beneficial insects, Insect biology, Lonchaea, Lonchaea bruggeri, Lonchaea seitneri, Lonchaea zetterstedti, Natural control (insects), Population, Scolytidae. English and Russian abstracts.

## 7836-69

## BASIC PREMISES OF A THEORY OF THE PROTECTION OF PLANTS AGAINST PESTS.

I Ya Polyakov

*Entomol Rev* 47(2, APR-JUN):200-210 REF

Jun 1968 421 R322AE

Crop yields, Economic entomology, Insect biology, Insect ecology, Insect pests, Plant pest control, Plant protection, Population, Surveys. Russian journal-Entomologicheskoye Obozreniye, p. 343-361.

7837-69

## RIDING GROUNDNUT OF RED HAIRY CATERPILLAR.

K A Ramaswamy S Kuppuswamy T

Santhanaraman

*Indian Farming* 18(8):21-22

Nov 1968 22 IN283

Amsacta, Benzene hexachloride, Carbophenothion, Chemical control (insects), Chlorinated hydrocarbons, Dichlorvos, Endrin, Imidan, Insecticides, Peanuts, Trichlorfon.

7838-69

## STEM APPLICATIONS OF AZODRIN FOR CONTROL OF THE COTTON FLEAHOPPER.

R L Ridgway B G Reeves C B Cowan L H Wilkes D A Lindquist

*J Econ Entomol* 59(2):315-318, TABS.

Apr 1966 421 J822

Azodrin, Cotton, DDT, Insecticide application, Systemic insecticides, Toxaphene, Trichlorfon.

7839-69

## THE COTTON LEAF WEEVIL, BUCCULATRIX THURBERIELLA BUSCK. THE HISTORY, HABITS, BIOLOGY AND METHODS OF CONTROL. (SP)

E Q Rocha

*Fitofito* 21(57-JAN-MAR):15-21

Mar 1968 421 F55

Biological control (insects), Bucculatrix thurberiella, Carbaryl, Chemical control (insects), Cotton, Insect biology, Insect control, Malathion, Parathion, Trichlorfon.

7840-69

## ON THE RELATIONSHIPS BETWEEN ANTS AND PARASITES OF COCCIDS AND APHIDS ON CITRUS.

D Rosen

*Beitr Entomol* 17(1-2):281-286 REF

1967 421 B392

Aphidiidae, Citrus, Coccidae, Coccophagus, Formicidae, Insect behavior, Insect ecology, Metaphycus, Microterys, Parasitic insects, Population.

7841-69

## THE HYMENOPTEROUS PARASITES OF SOFT SCALES ON CITRUS IN ISRAEL.

D Rosen

*Beitr Entomol* 17(1-2):251-279 REF

1967 421 B392

Biological control (insects), Ceroplastes floridensis, Ceroplastes rusci, Citrus, Coccus hesperidum, Hymenoptera, Parasitic insects, Saissetia oleae, Zoogeography.

7842-69

## A REVIEW OF HYMENOPTEROUS PARASITES OF CITRUS PEST APHIDS OF THE WORLD AND BIOLOGICAL CONTROL PROJECTS (HYM., APHIDIIDAE; HOM., APHIDOIDEA).

P Stary

*Acta Ent Bohemoslov* 64(1):37-61 REF

1967 420 C33

Aphidiidae, Aphidiinae, Biological control (insects), Citrus, Parasitic insects, Reviews.

7843-69

## FOREST ENTOMOLOGY IN THE USSR.

A I Vorontsov

*Entomol Rev* 47(2, APR-JUN):165-174 REF

Jun 1968 421 R322AE

Attractants, Chemosterilants, Economic entomology, Forest insects, Insect outbreak forecasting, Integrated control (insects), Population, Surveys, Zoogeography. Russian journal-Entomologicheskoye Obozreniye, p. 280-297.

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## NEMATODES

## WEEDS

7844-69

## THE INFLUENCE OF TOBACCO RING SPOT VIRUS AND TOBACCO MOSAIC VIRUS ON THE GROWTH OF MELOIDOGYNE JAVANICA.

A F Bird

*Nematologica* 15(2):201-209 REF

May 1969 436.8 N342

Beans, Meloidogyne javanica, Mosaic, Physiology, Ring spot, Tobacco, Tomatoes, Virus diseases (plants).

7845-69

## SURVEY, IDENTIFICATION AND PATHOGENICITY TESTS OF NEMATODES ASSOCIATED WITH TOBACCO GROWN IN CAGAYAN VALLEY AND THE ILOCOS REGION.

R V Cortado R G Davide

*Philippine Agr* 51(10):779-801 REF

Mar 1968 25 P542

Pathogenicity, Plant nematodes, Surveys, Tobacco, Zoogeography.

7846-69

## INFLUENCE OF TEMPERATURE ON POLYPHENOL OXIDASE ACTIVITY IN THREE SPECIES OF HETERODERA.

C Ellenby L Smith

*Compar Biochem Physiol* 21(1):51-57

Apr 1967 444.8 C73

Biochemistry, Heterodera avenae, Heterodera rostochiensis, Heterodera schachtii, Phenolases, Temperature.

7847-69

## THE RESISTANCE OF RHABDITIS SP. AND ANGUINA TRITICI (NEMATODA) TO DRYING AND ACTION OF LOW AND SUPERLOW TEMPERATURES. (RUS)

T Namatov

*Zool Zhur* 48(5):658-668 REF

May 1969 410 R92

Anguina tritici, Drying, Mortality, Physiology, Plant nematodes, Rhabditis, Temperature. English abstract.

7848-69

## RELATION BETWEEN VOLUME AND CONTENTS OF CYSTS OF HETERODERA ROSTOCHIENSIS WOLLENWEBER. (GE)

H Stelter P C Gaur

*Biol Zentralbl* 88(1, JAN-FEB):85-90

Feb 1969 442.8 B523

Cysts, Heterodera rostochiensis, Volumetric analysis.

7849-69

## IN VITRO FEEDING OF TELOTYLENCHUS LOOFI ON GREAT MILLET (SORGHUM VULGARE) ROOTS.

M G Tikyani S Khera

*Nematologica* 15(2):291-293

May 1969 436.8 N342

Plant nematodes, Roots, Sorghum, Tylenchidae.

7850-69

## SURVEY, IDENTIFICATION AND HOST-PARASITE RELATIONSHIPS OF ROOT-KNOT NEMATODES OCCURRING IN SOME PARTS OF THE PHILIPPINES.

R B Valdez

*Philippine Agr* 51(10):802-824 REF

Mar 1968 25 P542

Plants, Root knot nematode, Surveys.

7851-69

## GLASS-HOUSE AND LABORATORY STUDIES ON THE BIOLOGY OF THE NEEDLE NEMATODE, LONGIDORUS ELONGATUS.

A M Yassin

*Nematologica* 15(2):169-178 REF

May 1969 436.8 N342

Biology, Longidorus elongatus, Plant nematodes.

7852-69

## COMPARISON OF THE EFFECTS OF ARSENIC AND AMITROLE (3-AMINO-1,2,4-TRIAZOLE) IN THE CONTROL OF ERIOCEREUS MARTINII (LAB.) RICC.

G Diatloff

*Australian Inst Agr Sci J* 33(2):109

Jun 1967 23 AU74

Amitrole, Ammonium thiocyanate, Arsenic compounds, Chemical control (weeds), Eriocereus martinii, Herbicides.

7853-69

## A PROMISING NEW PRE-EMERGENCE HERBICIDE FOR GROUNDNUT.

D B Narsaiah L G Kulkarni R V Kumar

*Indian Farming* 18(11):31-33

Feb 1969 22 IN283

Chemical control (weeds), Dichlorophenyl-4-nitrophenyl ether, 2,4-, Economics, Herbicides, Peanuts.

7854-69

## SELECTIVE HERBICIDES CONTROL WEEDS IN LUCERNE AT COWRA.

N S Tickner

*Agr Gaz New S Wales* 79(12):718-720

Dec 1968 23 N472

Alfalfa, Capsella bursa-pastoris, Chemical control (weeds), Costs, DPA, Herbicides, Hordeum, Parquat.

7855-69

## BROMACIL: AN EFFECTIVE NON-SELECTIVE HERBICIDE FOR CONTROLLING NUTSEDGE IN THE ORD RIVER VALLEY. W.A.

P J Van Rijn

*Australian Inst Agr Sci J* 33(2):118-119

Jun 1967 23 AU74

Bromacil, Chemical control (weeds), Cyperus, Cyperus esculentus, Herbicides.

## OTHER PESTS

7856-69

## STUDIES ON THE COMPOSITION OF EXTRACTS OF THE REPRODUCTIVE GLANDS OF AGRILIMAX RETICULATUS, THE GREY FIELD SLUG (PULMONATA, STYLOMATOPHORA).

C J Bayne

*Compar Biochem Physiol* 23(3):761-773 REF

Dec 1967 444.8 C73

Amino acids, Glucose, Reproductive organs, Slugs, Tissues.

7857-69

## DAMAGE TO THE FLOWERS OF FRUIT TREES BY BIRDS.

G H L Dicker

*East Malling Res Sta Annu Rep* (A51):159-163

1968 103 EA7

Bird pests, Crop losses, Flowers, Fruit, Pigeons, Sparrows.

7858-69

## PHYSICO-CHEMICAL STUDIES OF PESTICIDES. III. EFFECT OF SOAP ON THE BIOLOGICAL ACTIVITY OF DDT SUSPENSIONS.

D K O'neill

*J Sci Food Agr* 14(6):442-448, 13 REFS., 6 FIGS.

Jun 1963 382 SO12

Biological control (insects), DDT, Soap, Tribolium.

## LIVESTOCK PROTECTION

7859-69

## THIOPENTAL ANAESTHESIA FOR CATS. (GE)

E Schimke E G Grunbaum

*Monatsl Vet* 23(16):635-638 REF

15 Aug 1968 41.8 M742  
Anesthesia, Atropine, Cats. English and Russian summaries.

**7860-69**  
**RESIDUES IN MILK OF COWS FED RATIONS CONTAINING LOW CONCENTRATIONS OF FIVE CHLORINATED HYDROCARBON PESTICIDES.**  
S Williams P A Mills R E McDowell  
*J Sci Food Agr* 16(7):II-43-4  
Jul 1965 382 SO12  
Cattle, Dieldrin, DDT, Endrin, Heptachlor epoxide, Lindane, Milk, Pesticide residues, TDE.

**DISEASES**

**7861-69**  
**BLOOD CHOLINESTERASE ACTIVITY AS AN INDEX OF ACUTE TOXICITY OF ORGANOPHOSPHORUS PESTICIDES IN SHEEP AND CATTLE.**  
P H Anderson A F Machin C N Hebert  
*Res Vet Sci* 10(1):29-33 REF  
Jan 1969 41.8 R312  
Blood, Cattle, Cholinesterases, Organophosphorus, Pesticides, Sheep, Toxicology. English summary.

**7862-69**  
**USE OF ALVEOLAR MACROPHAGES FOR CULTIVATION OF CANINE DISTEMPER VIRUS.**  
M J G Appel O R Jones  
*Soc Exp Biol Med Proc* 126(2):571-574 REF  
Nov 1967 442.9 SO1  
Canine distemper virus, Lungs, Macrophages, Tissue culture, Virus diseases (animals).

**7863-69**  
**LYMPHO CUTS FARM PROFITS ON SHEEP MEAT.**  
M C Armstrong  
*New Zeal J Agr* 118(5):77,79  
May 1969 23 N48J  
Caseous lymphadenitis, Corynebacterium, Goats, Infectious diseases, Livestock diseases, Sheep.

**7864-69**  
**A CASE OF TERATOMA IN THE LIVER OF SHEEP.**  
R G Arora P K R Iyer  
*Indian Vet J* 46(3):203-204  
Mar 1969 41.8 IN2  
Liver, Sheep, Teratoma, Tissue culture.

**7865-69**  
**CLINICO-MICROBIOLOGICAL AND IMMUNOLOGICAL STUDIES ON EXPERIMENTAL ORAL INFECTION IN PREGNANT SHEEP WITH SALMONELLA ABORTUS OVIS.**  
R Arsov R G Dhawedkar  
*Indian Vet J* 46(1):1-5 REF  
Jan 1969 41.8 IN2  
Immunology, Livestock diseases, Microbiology, Pregnancy, Salmonella abortusovis, Sheep.

**7866-69**  
**VIRUS DISEASES OF THE RESPIRATORY TRACT IN CATTLE. (GE)**  
A Bartha  
*Monatsh Vet* 23(16):613-617  
15 Aug 1968 41.8 M742  
Bedsonia virus, Cattle, Livestock diseases, Parainfluenza-3, Respiratory diseases, Scours, Virus diseases (animals). English and Russian summaries.

**7867-69**  
**ULTRASTRUCTURAL CHANGES IN EXPERIMENTAL LIPID PNEUMONIA.**  
A Baskerville  
*Res Vet Sci* 10(1):4-6 REF  
Jan 1969 41.8 R312  
Cells, Lipids, Lungs, Mice, Pneumonia. English summary.

**7868-69**  
**UREA IN THE RATION: HOW MUCH CAN WE SAFELY ADD.**  
W M Beeson  
*Amer Vet Med Ass J* 154(10):1220-1225 REF  
15 May 1969 41.8 AM3  
Alfalfa, Cattle, Nitrogen compounds, Proteins, Urea.

**7869-69**  
**MYCOTOXICOSIS ASSOCIATED WITH HEMORRHAGIC ENTEROCOLITIS AND ABORTION IN SWINE.**  
D I Blevins M W Glenn A H Hamdy T F Brodasky R A Evans  
*Amer Vet Med Ass J* 154(9):1043-1050 REF  
01 May 1969 41.8 AM3  
Abortion, Animal diseases, Aspergillus, Diarrhea, Mycotoxicosis, Penicillium rubrum, Rhizopus, Swine.

**7870-69**  
**ACTIMOBACILLUS LIGNIERESII INFECTION IN A DOG.**  
A V Carb S K Liu  
*Amer Vet Med Ass J* 154(9):1062-1067 REF  
01 May 1969 41.8 AM3  
Actinobacillus, Animal diseases, Diagnosis, Dogs.

**7871-69**  
**CAPRINE PNEUMONITIS CAUSED BY A VIRUS OF PSITTACOSIS LYMPHOGRANULOMA VENERUM (PLV) GROUP.**  
H V S Chauhan C M Singh  
*Cur Sci* 38(7):166-167  
05 Apr 1969 475 SCI23  
Goats, Miyagawanella group viruses, Pneumonia, Virus diseases (animals).

**7872-69**  
**GEL FILTRATION OF LEPTOSPIRAL LIPASE ON SEPHADEX G 200.**  
B Chorvath  
*Biologia (bratislava)* 22(11):817-822 REF  
1967 442.8 B5265  
Filters, Gels, Leptospira, Lipases, Serological tests.

**7873-69**  
**SERUM MEDIATED KILLING OF THREE GROUP D SALMONELLAS.**  
F M Collins  
*J Gen Microbiol* 46(2):247-254 REF  
Feb 1967 448.3 J823  
Antigens, Antiserum, Chickens, Mice, Salmonella enteritidis, Salmonella gallinarum, Salmonella pullorum.

**7874-69**  
**STILBESTROL, ANTIBIOTICS, VITAMINS, UREA, MINERALS: WHAT WE'RE LEARNING ABOUT FEEDING BEEF.**  
T J Cunha  
*World Farming* 11(5):31-32,37-38  
May 1969 30.08 W89  
Animal nutrition, Antibiotics, Cattle, Diethylstilbestrol, Fattening, Hormones, Livestock, Micronutrients, Minerals, Urea, Vitamins.

**7875-69**  
**A SURVEY OF DISEASES IN FALLOW, VIRGINIA AND JAPANESE DEER, CHAMOIS, TAHR, AND FERAL GOATS AND PIGS IN NEW ZEALAND.**  
M J Daniel  
*New Zealand J Sci* 10(4):949-963 MAP REF  
Dec 1967 514 N482  
Deer, Goats, Serological tests, Surveys, Swine, Wildlife diseases.

**7876-69**  
**EXPERIMENTAL INFECTION OF CALVES WITH BOVINE ADENOVIRUS TYPES 1 AND 2.**  
J H Darbyshire D A Kinch A R Jennings  
*Res Vet Sci* 10(1):39-45 REF  
Jan 1969 41.8 R312  
Adenoviruses, Calves, Diarrhea, Pneumonia, Viruses. English summary.

**7877-69**  
**ELECTRON AND LIGHT-MICROSCOPE INVESTIGATIONS ON TWO SPECIES OF FELINE BABESIA. (GE)**  
H K Dennig R Hebel  
*Z Parasitenk* 32(2):95-111 REF  
12 May 1969 442.8 Z33F  
Babesia, Cats, Cytology, Electron microscopy, Piroplasmosis. English abstract.

**7878-69**  
**MYOCARDIUM INFARCT IN HORSES WITH INFECTIOUS ANEMIA. (GE)**  
M A Dobin J F Epschtein  
*Monatsh Vet* 23(16):627-630  
15 Aug 1968 41.8 M742  
Equine infectious anemia, Heart, Horses, Livestock diseases, Myocardium, Thrombosis. English and Russian summaries.

**7879-69**  
**THE EXPERIMENTAL EFFECT OF GENTAMYCIN AND IN MASTITIS OF CATTLE. (GE)**  
R E Dunham  
*Giessen Justus Liebig Univ Veterinarmed Fak (inaug-diss)* (30):50P REF  
1967 41.2 G3642  
Antibiotics, Cattle, Gentamycin, Livestock diseases, Mastitis.

**7880-69**  
**MORPHOLOGY OF BLUETONGUE VIRUS.**  
H J Els D W Verwoerd  
*Virology* 38(2):213-219 REF  
Jun 1969 448.8 V81  
Bluetongue virus, Morphology. English summary.

**7881-69**  
**PHYSIOLOGICAL EVENTS IN THE COURSE OF THE GROWTH AND DIFFERENTIATION OF TRYPANOSOMA CRUZI.**  
J F Fernandes O Castellani E Kimura  
*Genet Soc Amer Rec* 61(1,PT 2,SUPPL):213-226 REF  
1969 442.9 G28  
Development, Physiology, Tissue culture, Trypanosoma cruzi.

**7882-69**  
**HEAT INACTIVATION OF FOOT-AND-MOUTH DISEASE VIRUS IN BLOOD PRODUCTS.**  
L S Forbes G E Cottrell  
*Res Vet Sci* 10(1):98-100  
Jan 1969 41.8 R312  
Blood, Cattle, Foot-and-mouth disease virus, Heat. English summary.

**7883-69**  
**THE PREVALENCE OF SALMONELLOSIS AND SYMPTOMATIC CARBUNCLES IN CATTLE SUBJECTED TO BACTERIOLOGICAL EXAMINATION DURING 1968, IN THE STATE OF SAO PAULO. (POR)**  
W Giorgi C Troise  
*Biologico* 35(2):49-50  
Feb 1969 442.8 B529  
Animal diseases, Cattle, Salmonellosis.

**7884-69**  
**SWINE SALMONELLOSIS IN A HAWAIIAN PIGGERY.**  
J M Gooch R L Haddock  
*Amer Vet Med Ass J* 154(9):1051-1054  
01 May 1969 41.8 AM3  
Epizootic diseases, Salmonellosis, Surveys, Swine.

**7885-69**  
**KALE ANAEMIA. I. THE TOXICITY TO VARIOUS SPECIES OF ANIMAL OF THREE TYPES OF KALE.**  
J F D Greenhalgh G A M Sharman J N Aitken  
*Res Vet Sci* 10(1):64-72 REF  
Jan 1969 41.8 R312  
Animals, Kale, Toxicology. English summary.

7886-69

POSSIBLE OCCURRENCE OF VIRAL PNEUMONIA IN INDIGENOUS SHEEP AND GOATS - A MORPHOLOGICAL STUDY OF PNEUMONIC LUNG LESIONS.

P P Gupta B S Rajya

*Indian Vet J* 46(3):205-208 REF

Mar 1969 41.8 IN2

Bronchiectasis, Goats, Hematoxylin, Infectious diseases, Pigmentation, Pneumonia, Sheep.

7887-69

LIVESTOCK HEALTH - PLANNING TO PREVENT PREGNANCY TOXAEMIA.

J S Healey

*Agri Gaz New S Wales* 80(2):85-87

Feb 1969 23 N472

Animal nutrition, Pregnancy, Sheep, Toxemia.

7888-69

COSTS OF FEEDLOT DISEASE AND PREVENTION PROGRAMS.

J R Howard

*Amer Vet Med Ass J* 154(10):166-1167

15 May 1969 41.8 AM3

Feedlots, Livestock.

7889-69

OBSERVATIONS OF INFECTIOUS DIARRHEA AS PART OF THE SHIPPING FEVER SYNDROME IN FEED LOT CATTLE.

J R Howard

*Amer Vet Med Ass J* 154(10):1201-1202

15 May 1969 41.8 AM3

Cattle, Diarrhea, Feedlots, Fever, Lymph nodes, Pleuropneumonia, Tissues.

7890-69

PURIFICATION OF THE FOOT-AND-MOUTH VIRUS BY MEANS OF FLUOROCARBON. (CZ)

R Hubik R Laznicka R Fepak

*Czech Min Zemed Les Hospod Ustav Vedeckotech**Inform Vet Med* 13(10):521-526 REF

Oct 1968 41.9 C333

Foot-and-mouth disease virus, Viral vaccines, Virology, Russian, English and German abstracts.

7891-69

SEROLOGICAL RELATION BETWEEN BOVINE EPIZOOTIC FEVER AND EPHEMERAL FEVER.

Y Inaba Y Tanaka T Omori M Matumoto

*Jap J Microbiol* 13(1):129-130

Mar 1969 448.8 J273

Antigens, Cattle, Ephemeral fever, Virus diseases (animals).

7892-69

BOVINE BRUCELLOSIS IN MADHYA PRADESH (A SEROLOGICAL STUDY).

R S Kataria G P Verma

*Indian Vet J* 46(1):13-16 REF

Jan 1969 41.8 IN2

Brucellosis, Buffaloes, Cattle, Livestock diseases, Pregnancy, Serological tests.

7893-69

RESULTS OF THE PREVENTION OF TUBERCULOSIS IN CATTLE IN SLOVENIA FROM 1947 TO 1967. (SE)

N Klemenc J Prevorcnik V Gregorovic

*Vet Glas* 22(11):935-943 MAP

1968 41.8 J93

Cattle, Epidemiology, Livestock diseases, Tuberculosis, English and Russian summaries.

7894-69

LIPIDS OF PLASMA MEMBRANES OF MONKEY AND HAMSTER KIDNEY CELLS AND OF PARAINFLUENZA VIRIONS GROWN IN THESE CELLS.

H D Klenk P W Choppin

*Virology* 38(2):255-268 REF

Jun 1969 448.8 V81

Cells, Hamsters, Lipids, Monkeys, Parainfluenza, Plasma membrane, Viruses. English summary.

7895-69

BILIRUBINAEMIA IN THE DIFFERENTIAL DIAGNOSTICS OF HEPATOPATHIES AND INTERNAL DISEASES IN HORSES. (GE)

J Konrad

*Monatsh Vet* 23(16):622-626 REF

15 Aug 1968 41.8 M742

Bilirubin, Cirrhosis, Horses, Liver diseases, Livestock diseases. English and Russian summaries.

7896-69

THE DEVELOPMENT OF FOCI INCIDENCE OF BOVINE BRUCELLOSIS IN CZECHOSLOVAKIA. (CZ)

V Kouba

*Czech Min Zemed Les Hospod Ustav Vedeckotech**Inform Vet Med* 14(3):169-178 REF

Mar 1969 41.9 C333

Brucellosis, Cattle, Livestock diseases, Surveys, Russian, English and German abstracts.

7897-69

THE PREVALENCE OF BRUCELLOSIS OF CATTLE IN CZECHOSLOVAKIA. (CZ)

V Kouba

*Czech Min Zemed Les Hospod Ustav Vedeckotech**Inform Vet Med* 14(2):113-122 REF

Feb 1969 41.9 C333

Brucellosis, Cattle, Livestock diseases, Surveys, Russian, English and German abstracts.

7898-69

THE INCIDENCE OF BRUCELLOSIS OF CATTLE IN CZECHOSLOVAKIA. (CZ)

V Kouba

*Czech Min Zemed Les Hospod Ustav Vedeckotech**Inform Vet Med* 13(10):551-560 REF

Oct 1968 41.9 C333

Brucellosis, Cattle, Livestock diseases, Surveys, Russian, English and German abstracts.

7899-69

NUTRITIONAL MANAGEMENT AND BOVINE KETOSIS.

D S Kronfeld R S Emery

*Mod Vet Pract* 50(4):45-49

Apr 1969 41.8 N812

Cattle, Grain, Ketosis, Nutrition.

7900-69

CONTRIBUTION TO THE STUDY OF ARTHRITIS OF THE DOG. ATTEMPTS OF TREATMENT WITH OROTIC ACID. (FR)

D R Laffra

*Alfort Ecole Nat Vet These* (91):54P REF

1968 41.2 AL23

Animal diseases, Arthritis, Dogs, Medicine, Orotic acid, Therapeutics, Toxicology, Veterinary medicine.

7901-69

A VIRUS INHIBITOR CIRCULATING IN THE BLOOD OF CHICKENS, INDUCED BY FRANCISELLA TULARENSIS AND LISTERIA MONOCYTOGENES.

B Lukas J Hruskova

*Folia Microbiol* 12(2):157-161 REF

1967 448.3 C332

Biochemistry, Chickens, Listeria monocytogenes, Pasteurella tularensis, Serum, Virucides.

Following the intravenous inoculation of chickens with large doses of living Francisella (Pasteurella) tularensis and Listeria monocytogenes, a virus inhibitor appeared in their serum. The first traces of the inhibitor were found four hours and the maximum levels eight and 24 hours after inoculation with a bacterial suspension. The administration of heat-inactivated microorganisms did not induce formation of the inhibitor. The dynamics of formation of the inhibitor and its properties resembled those of virus interferon.

7902-69

PREVALENCE OF SALMONELLAES IN VIRGINIA POULTRY FLOCKS AND IN FEED.

M B Marx

*Amer Vet Med Ass J* 154(9):1055-1056

01 May 1969 41.8 AM3

Feed contamination, Livestock diseases, Poultry, Salmonella, Surveys.

7903-69

FOOT-AND-MOUTH DISEASE IN ENGLAND.

N L Meyer

*Amer Vet Med Ass J* 154(10):1226-1229

15 May 1969 41.8 AM3

Foot-and-mouth disease, Livestock.

7904-69

ROLE OF PROTOZOA IN RUMEN METABOLISM WITH SPECIAL REFERENCE TO BLOAT.

B Mishra

*Indian Vet J* 46(1):42-49 REF

Jan 1969 41.8 IN2

Animal physiology, Bloat, Cattle, Diet, Livestock diseases, Metabolism, Protozoa, Ruminants.

7905-69

WHAT'S NEW WITH BOVINE RESPIRATORY PROBLEMS.

D J Moeller

*Amer Vet Med Ass J* 154(10):1197-1200 REF

15 May 1969 41.8 AM3

Cattle, Immunization, Pasteurella multocida, Respiratory diseases. English summary

7906-69

ADVANCES IN CATTLE ECTOPARASITE CONTROL WITH A DISCUSSION OF SOME PROBLEMS RELATED TO TREATMENT WITH SYSTEMIC INSECTICIDES.

J O Mozier

*Amer Vet Med Ass J* 154(10):1206-1213

15 May 1969 41.8 AM3

Cattle, Ectoparasites, Hydrocarbons, Insecticides, Larvae, Organophosphorus.

7907-69

CULTIVATION OF TRYPARASOMA CRUZI IN A PROTEIN-FREE DIALYSATE MEDIUM.

M Nakamura

*Soc Exp Biol Med Proc* 125(3):779-780

Jul 1967 442.9 SO1

Culture media, Methodology, Tissue culture, Trypanosoma cruzi.

7908-69

CLINICAL PATTERN OF NERVOUS DISTEMPER. (GE)

U Oldenburg

*Monatsh Vet* 23(16):634-635

15 Aug 1968 41.8 M742

Canine distemper, Dogs, Nervous system diseases, Paresis. English and Russian summaries.

7909-69

CONTAGIOUS ECTHYMA IN SHEEP IN THE STATE OF SAO PAULO. (POR)

N S Piegas M R Nilsson

*Biologico* 34(12):265

Dec 1968 442.8 B529

Ecthyma, Livestock diseases, Sheep, Virus diseases (animals).

7910-69

INCIDENCE OF TUBERCULOSIS IN CATTLE IN RAJASTHAN.

A K Purohit P N Mehrotra

*Indian Vet J* 46(1):5-12 REF

Jan 1969 41.8 IN2

Buffaloes, Cattle, Livestock diseases, Tuberculin test, Tuberculosis.

7911-69

OBSERVATIONS ON THE INCIDENCE AND HISTOPATHOLOGY OF PNEUMONIA OF SHEEP AND GOATS IN INDIA.

S Ramachandran G L Sharma

*Indian Vet J* 46(1):16-29 REF

Jan 1969 41.8 IN2

Corynebacterium, Goats, Livestock diseases, Pasteurella, Pneumonia, Respiratory diseases, Sheep, Staphylococcus, Streptococcus.

**7912-69**  
**NABOTHIAN CYSTS IN BUFFALO CERVIX.**  
 C R Sane B R Deshpande D P Velhankar R M Bhandari  
*Indian Vet J* 46(1):29-32  
 Jan 1969 41.8 IN2  
 Buffaloes, Cervical malformation, Cysts, Livestock diseases, Reproductive organs.

**7913-69**  
**DIAGNOSTIC POTENTIALITIES OF INDIRECT HEMAGGLUTINATION TEST IN CHICKEN ARTIFICIALLY INFECTED WITH SALMONELLA.**  
 V A Sapre M L Mehta  
*Indian Vet J* 46(3):183-190 REF  
 Mar 1969 41.8 IN2  
 Antigens, Fowl typhoid, Hemagglutination, Infectious diseases, Poultry, Pullorum disease, Salmonella.

**7914-69**  
**ACTINOMYCOSIS OF CATTLE, WITH CONSIDERATION OF ATYPICAL LOCALISATION.** (GE)  
 H G Sattler  
*Monatsh Vet* 23(16):607-613  
 15 Aug 1968 41.8 M742  
 Actinomycosis, Cattle, Livestock diseases. English and Russian summaries.

**7915-69**  
**DIAGNOSIS OF RINDERPEST.**  
 G R Scott  
*Food Agr Organ UN FAO Agr Stud* (71):141P REF  
 1967 28 F73  
 Diagnosis, Epizootic diseases, Methodology, Microorganisms, Rinderpest, Rinderpest virus, Serological tests, Virology, Virus diseases (animals).

**7916-69**  
**POULTRY DISEASES, OLD DISEASES UNDER CONTROL, BUT NEW ONES RAISE THEIR HEADS.**  
 C M Singh  
*Indian Farming* 18(9):28-29  
 Dec 1968 22 IN283  
 Epizootic diseases, Poultry diseases, Surveys.

**7917-69**  
**PATHOLOGY OF CAPRINE LIVER INFESTED WITH GIGANTOCOTYLE EXPLANATUM (CREPLIN 1847).**  
 P N Singh P B Kuppuswamy  
*Indian Vet J* 46(3):209-210  
 Mar 1969 41.8 IN2  
 Bile ducts, Goats, Hematology, Infectious diseases, Liver.

**7918-69**  
**CONTROLLING FOOTROT - EQUIPMENT USED IN THE ARMDALE QUARANTINE AREA.**  
 M G Smeal  
*Agr Gaz New S Wales* 80(2):71-75  
 Feb 1969 23 N472  
 Chemical control (animal diseases), Dairy equipment, Foot rot (animals), Formaldehyde, Fusiformis nodosus, Infectious diseases, Quarantine, Sheep.

**7919-69**  
**PHYCOMYCOSIS AND ASPERGILLOYSIS OF CATTLE.**  
 J M B Smith  
*New Zeal Vet J* 16(10-11, OCT-NOV):166  
 Oct 1968 41.8 N483  
 Animal diseases, Aspergillosis, Cattle, Phycomycosis.

**7920-69**  
**COMPARATIVE CHROMATOGRAPHIC STUDIES ON DEAE-SEPHADEX BETWEEN HEMAGGLUTININS OF JBE VIRUS (NAKAYAMA STRAIN) AND A CLOSE STRAIN ISOLATED IN VIET-NAM. (FR)**

J Tamalet M Brahic  
*Paris Soc Biol Compt Rend* 161(5):1126-1130  
 25 Nov 1967 442.9 P21  
 Chromatography, Hemagglutination, Japanese encephalitis virus, Methodology.

**7921-69**  
**IMMUNOGENIC VALUE OF BIVALENT VACCINE OF ATYPIC FOWL PEST AND FOWL POX PRODUCED ON TISSUE CULTURE. (SE)**  
 B Vasic N Vasic V Nedic D Tadic Z Kesic  
*Vet Glas* 22(11):945-951 REF  
 1968 41.8 J93  
 Fowlpox, Immunology, Newcastle disease, Newcastle disease virus, Poultry diseases, Tissue culture, Vaccines, Viruses. English and Russian summaries.

**7922-69**  
**PURIFICATION AND CHARACTERIZATION OF BLUETONGUE VIRUS.**  
 D W Verwoerd  
*Virology* 38(2):203-212 REF  
 Jun 1969 448.8 V81  
 Bluetongue virus, Morphology, Sheep. English summary.

**7923-69**  
**ABDOMINAL FAT NECROSIS AS A HERD PROBLEM IN GEORGIA CATTLE.**  
 D J Williams D E Tyler E Papp  
*Amer Vet Med Ass J* 154(9):1017-1021 REF  
 01 May 1969 41.8 AM3  
 Cattle, Intestines, Necrosis, Tissues. English summary.

**7924-69**  
**WHAT YOU CAN DO TO KEEP CHOLERA ERADICATION MOVING.**  
 R Wilmore  
*Farm J* H12-H14  
 Apr 1969 6 F2212C  
 Hog cholera, Legislation.

**7925-69**  
**RIBONUCLEIC ACIDS SYNTHESIZED IN VENEZUELAN EQUINE ENCEPHALITIS-INFECTED CELLS.**  
 V M Zhdanov F I Yershov L V Uryvayev  
*Virology* 38(2):355-358  
 Jun 1969 448.8 V81  
 Cells, Horses, Ribonucleic acid, Venezuelan equine encephalitis virus.

**ARTHOPODS**

**7926-69**  
**LIVING CERATOPOGONID LARVAE (DIP-TERA) IN THE INTESTINES OF FISH. (GE)**  
 A Kureck  
*Entomol Z* 79(1-2):12  
 15 Jan 1969 421 EN85  
 Ceratopogonidae, Fish, Intestines, Larvae, Parasitic insects.

**7927-69**  
**HOUSE FLY, MUSCA DOMESTICA, CONTROL WITH CHEMOSTERILANTS AND INSECTICIDES.**  
 D W Meifert G C LaBrecque J R Rye  
*Fla Entomol* 52(2):55-60  
 May 1969 420 F662  
 Biological control (insects), Chemical control (insects), Chemosterilants, Coumaphos, Dimethoate, Hempa, Musca domestica, Poultry, Swine, Thiourea, Trichlorfon.

Field tests in poultry-caged-layer operations showed that hempa plus thiourea, hempa in sugar bait, trichlorfon in granular sugar bait and dimethoate in water all gave good control of house flies, *Musca domestica*. Releases of sterile flies in a pig-rearing establishment combined with weekly larvicide treatments reduced the field fly population by more than 5-fold.

**7928-69**  
**ECOLOGY OF LICE ON SHEEP. VII. POPULATION DYNAMICS OF DAMALINIA OVIS (SCHRANK).**  
 M D Murray G Gordon  
*Australian J Zool* 17(2):179-186 REF  
 Apr 1969 410 AU73  
*Bovicola ovis*, Insect ecology, Population, Sheep.

**7929-69**  
**DIETLAMID-SPRAY AS AN ANT REPELLENT. (GE)**  
 D Novak  
*Angew Parasitol* 10(1):63  
 Feb 1969 436.8 AN4  
 Deet, Insect repellents, *Monomorium pharaonis*.

**PARASITES**

**7930-69**  
**THE SEQUENTIAL DEVELOPMENT OF NATURALLY OCCURRING OSTERTAGIASIS IN CALVES.**  
 N Anderson J Armour F W Jennings J S D  
 Ritchie G M Urquhart  
*Res Vet Sci* 10(1):18-28 REF  
 Jan 1969 41.8 R312  
 Calves, Ostertagiasis. English summary.

**7931-69**  
**THE SYNTHESIS OF FATTY ACIDS FROM ACETATE BY INTACT TISSUE AND MUSCLE EXTRACT OF ASCARIS LUMBRICOIDES SUUM.**  
 C G Beames B G Harris F A Hopper  
*Compar Biochem Physiol* 20(2):509-521 REF  
 Feb 1967 444.8 C73  
 Acetates, *Ascaris lumbricooides*, Biochemistry, Fatty acids, Muscles, Radioactive tracers, Tissues.

**7932-69**  
**STUDIES ON MEMBRANE TRANSPORT. V. TRANSPORT OF LONG CHAIN FATTY ACIDS IN HYMENOLEPIS DIMINUTA (CESTODA).**  
 L H Chappell C Arme C P Read  
*Biol Bull* 136(3):313-326 REF  
 Jun 1969 442.8 B52  
 Biochemistry, Biological transport, Fatty acids, *Hymenolepis diminuta*.

**7933-69**  
**SPECTROPHOTOMETRIC STUDIES ON THE SUCCINIC OXIDASE SYSTEM OF TAENIA HYDATIGENA.**  
 K S Cheah  
*Compar Biochem Physiol* 20(3):867-875 REF  
 Mar 1967 444.8 C73  
 Biochemistry, Physiology, Spectrophotometry, Succinic oxidase, *Taenia hydatigena*.

**7934-69**  
**HISTOCHEMICAL AND SPECTROPHOTOMETRIC DEMONSTRATION OF PEROXIDASE IN MONIEZIA EXPansa (CESTODA).**  
 K S Cheah  
*Compar Biochem Physiol* 21(2):351-355 REF  
 May 1967 444.8 C73  
 Aging, Histochemistry, *Moniezia expansa*, Peroxidases, Spectrophotometry.

**7935-69**  
**STEROLS IN ASCARIS LUMBRICOIDES.**  
 R J Cole L R Krusberg  
*Compar Biochem Physiol* 21(1):109-114 REF  
 Apr 1967 444.8 C73  
*Ascaris lumbricooides*, Biochemistry, Sex, Sterols.

**7936-69**  
**THE COMPARATIVE BIOCHEMISTRY OF DEVELOPING ASCARIS EGGS-VII. MALATE OXIDATION AND METABOLISM IN UNEMBRYONATED EGGS.**  
 L C Costello W Smith H Dya  
*Compar Biochem Physiol* 21(1):161-170 REF

## LIVESTOCK PROTECTION

7937-69

Apr 1967 444.8 C73  
Ascaris lumbricoides, Biochemistry, Malate, Metabolism.

7937-69  
ENDOCARDITIS IN HORSES. (GE )  
M A Dobin

Monatsh Vet 23(16):630-633  
15 Aug 1968 41.8 M742

Aorta, Endocarditis, Horses, Larvae, Livestock diseases, Parasitism. English and Russian summaries.

7938-69  
ANTIGENS OF MONIEZIA EXPansa: FLUORESCENT ANTIBODY LOCALIZATION. A E Duwe

Amer Microscop Soc Trans 86(2):126-131 REF  
Apr 1967 440.9 AM33  
Antibodies, Antigens, Electrophoresis, Immunofluorescence, Moniezia expansa, Serological tests.

7939-69  
ON THE X-RAY DIAGNOSTICS OF INTESTINAL HELMINTHIASES OF POULTRY. (CZ )  
K Fried J Jantosovic

Czech Min Zemed Les Hospod Ustav Vedeckotech Inform Vet Med 14(2):147-154  
Feb 1969 41.9 C333

Diagnosis, Helminthiasis, Intestines, Poultry diseases, X-rays. Russian, English and German abstracts.

7940-69  
SYNGENEIC MARROW GRAFT: EFFECT ON PERSISTENCE OF PREIRRADIATION IMMUNITY TO HYMENOLEPIS NANA IN MICE. W Friedberg B R Neas M H Friedberg D N Faulkner

Soc Exp Biol Med Proc 124(3):792-793  
Mar 1967 442.9 SO1

Hymenolepis nana, Immunity, Mice, Tissue grafting, X-rays.

7941-69  
ISOLATION OF COLLAGENS OF HIGH HYDROXYPROLINE, HYDROXYLYSINE AND CARBOHYDRATE CONTENT FROM MUSCLE LAYER OF ASCARIS LUMBRICOIDES AND PIG KIDNEY. D Fujimoto

Biochim Biophys Acta 168(3):537-543 REF  
03 Dec 1968 381 B522

Amino acids, Ascaris lumbricoides, Carbohydrates, Collagen, Hydroxylysine, Hydroxyproline, Muscles, Swine.

7942-69  
CATALASE INHIBITION IN ASCARIDIA GALLI. (GE )  
J Hovorka J Bencko P Lestan

Angew Parasitol 10(1):14-20 REF  
Feb 1969 436.8 AN4

Ascaridia galli, Biochemistry, Catalase, Enzymes. English and Russian abstracts.

7943-69  
METABOLISM OF ASCAROSIDES IN THE OVARIES OF ASCARIS LUMBRICOIDES (NEMATODA). P F Jezyk D Fairbairn

Compar Biochem Physiol 23(3):707-719 REF  
Dec 1967 444.8 C73

Anthelmintics, Ascaris lumbricoides, Metabolism, Ovaries.

7944-69  
ASCAROSIDES AND ASCAROSIDE ESTERS IN ASCARIS LUMBRICOIDES (NEMATODA). P F Jezyk D Fairbairn

Compar Biochem Physiol 23(3):691-705 REF  
Dec 1967 444.8 C73

Anthelmintics, Ascaris lumbricoides, Biochemistry, Chromatography, Histochemistry.

## BIBLIOGRAPHY

7945-69

THE INFLUENCE OF SOME BIOLOGICAL AND ECOLOGICAL FACTORS ON THE CATALASE ACTIVITY IN ASCARIDIA GALLI.

P Lestan J Bencko  
Biologia (bratislava) 22(10):762-768

1967 442.8 B5265

Ascaridia galli, Biological assay, Catalase, Ecology, Physiology.

7946-69

HISTOCHEMICAL MAPS OF THE LIPIDS IN THE EPIDERMAL ESOPHAGUS MUSCULATURE OF ASCARIS SUUM AND ASCARIDIA GALLI. (CONTRIBUTION TO THE STUDY OF THE STRUCTURE OF THE EPIDERMAL ESOPHAGUS MUSCULATURE OF MODEL ASCARIDS I.). (CZ )  
P Lestan

Biologia (bratislava) 22(8):572-578 REF

1967 442.8 B5265

Ascaridia galli, Ascaris lumbricoides suum, Biochemistry, Esophagus, Histochemistry, Lipids, Muscles. German and Russian abstracts.

7947-69

OBLIGATE AND OPTIONAL HOSTS FOR HELMINTHS. (GE )

K Odening

Angew Parasitol 10(1):21-36 REF

Feb 1969 436.8 AN4

Animals, Helminthiasis, Parasitism. English and Russian abstracts.

7948-69

THE CELLULAR PATTERN IN INVASIVE ONCOSPHERES OF HYMENOLEPIS DIMINUTA AS REVEALED BY AN ENZYME-ACETIC ACID-ORCEIN METHOD.

R E Ogren

Amer Microscop Soc Trans 86(3):250-260

Jul 1967 440.9 AM33

Cytology, Histology, Hymenolepis diminuta, Rats.

7949-69

CONTEMPORARY VIEWS ON THE IMMUNOLOGICAL PROPHYLAXIS OF HELMINTHOLOGICAL DISEASES. (POL )

Z Przyjalkowski

Kosmos Ser A Biol 16(5):515-524 REF

1967 442.8 K84

Helminthiasis, Immunology, Nematodes, Reviews.

7950-69

A PHYSIOLOGICAL STUDY OF THE DEVELOPMENT OF THE EGG OF FASCIOLA HEPATICA L., THE COMMON LIVER FLUKE.

R A Wilson

Compar Biochem Physiol 21(2):307-320 REF

May 1967 444.8 C73

Biochemistry, Fasciola hepatica, Physiology.

7951-69

THE PROTONEPHRIDIAL SYSTEM IN THE MIRACIDIUM OF THE LIVER FLUKE, FASCIOLA HEPATICA L..

R A Wilson

Compar Biochem Physiol 20(1):337-342

Jan 1967 444.8 C73

Embryology, Fasciola hepatica, Kidneys, Light, Osmotic pressure, Temperature.

## COMMODITY PROTECTION

7952-69

PHYTOSANITATION CAMPAIGNS FOR CARGO UNDER THE DIRECTOR GENERAL FOR VEGETABLE SANITATION. (SP )

D L Arrieta R C Padilla

Fitofito 21(57, JAN-MAR):5-14

Mar 1968 421 F55

Fright, Fungi, Insects, Sanitation control (insects).

7953-69

DETERMINATION OF DDT IN BIOLOGICAL MATERIAL.

G Janicek J Davider

J Sci Food Agr 16(7):II-42-1

Jul 1965 382 SO12

Biological assay, DDT.

## ARTHROPODS

7954-69

CONTAMINATION OF BAGGED WHOLE GINGER AFTER SURFACE TREATMENT WITH TWO SYNTHETIC CONTACT INSECTICIDES.

J A McFarlane L Donegan

J Sci Food Agr 13(12):634-638

Dec 1962 382 SO12

Ginger, Insecticides.

7955-69

UTILIZATION OF AN ARTIFICIAL FOOD FOR THE TESTING OF FOOD INSECTICIDES. (GE )

L Weismann D Podmanicka

Biologia (bratislava) 22(8):561-565

1967 442.8 B5265

Chemical control (insects), Insect nutrition, Insecticides, Mamestra brassicae, Stored product insects.

## ENVIRONMENTAL CONTAMINATION

7956-69

DDT YES OR NO .

Anonymous

Aerial Appl 7(6):4,10

Jul 1969 333.8 AE8

Animals, Aquatic animals, DDT, Environment, Humans, Pesticide residues, Regulations.

7957-69

COLLECTION AND ANALYSIS OF SYNTHETIC ORGANIC PESTICIDES FROM SURFACE AND GROUND WATER.

E Hindin D S May G H Dunstan

Residue Rev 7:130-156, 25 REFS., 8 TABS., 5 FIGS.

1964 389.9 R314

Acetylcholinesterase, Aldrin, Chlordane, Chromatography, Diazinon, Dieldrin, DDT, Endosulfan, Endrin, Heptachlor, Lindane, Malathion, Methoxychlor, Parathion, Ronnel, Water analysis.

## RESIDUES

7958-69

DIELDRIN TRANSLOCATION AND ACCUMULATION IN CORN.

G B Beestman D R Keeney G Chesters

Agron J 61(3, MAY-JUN):390-392 REF

Jun 1969 4 AM34P

Corn, Dieldrin, Plant physiology, Plant translocation, Radioactive tracers.

The stalks below the fifth node were the primary site of dieldrin localization, and contained 70 to 90 per cent of the total amount in the plant. Dieldrin accumulated in corn in decreasing concentrations in the following order; flower stalks, lower leaves, upper stalks, upper leaves, ears.

7959-69

INSECTICIDES IN HUMAN FAT IN NEW ZEALAND.

H V Brewerton H J W McGrath

New Zealand J Sci 10(2):486-492 REF

Jun 1967 514 N482

Adipose tissue (animals), Analogs, Chemical analysis, Chlorinated hydrocarbons, DDT, Insecticide residues, Statistical analysis.

Initial results in a programme of analyses of human fats for persistent organo-chlorine insecticides are reported. After fifty-two analyses, mean levels of DDT and DDE were 1.6 and 3.8 p.p.m. respectively.

7960-69

## DICLORAN ANALYSIS BY GAS CHROMATOGRAPHY.

H V Brewerton P J Clark H J W McGrath  
*New Zealand J Sci* 10(1):124-127

Mar 1967 514 N482

Chemical analysis, Chromatography, Dichloro-4-nitroaniline, 2,6-, Fungicide residues, Strawberries, Sweetpotatoes.

Dichloran (2,6-dichloro-4-nitroaniline), a fungicide used in control of post harvest rots, is readily analyzed down to o.i p.p.m. by gas chromatography with electron capture detection. Dichloran treatment trials on kumarae (sweet potatoes) and strawberries resulted in residues not greater than 5.9 and 4.8 p.p.m. respectively.

7961-69

## PESTICIDE RESIDUES IN TOTAL DIET SAMPLES.

R E Duggan H C Barry L Y Johnson  
*Weed Abs* 15(2):115

Mar 1966 241 G797

Dichloro-2,2-bis(p-chlorophenyl) ethylene, 1,1-, Dieldrin, Diet, DDT, Food, TDE.

7962-69

## INSECTICIDE EXPOSURE: A SENSITIVE PROCEDURE FOR URINARY P-NITROPHENOL DETERMINATION AS A MEASURE OF EXPOSURE TO PARATHION.

J W Elliott K C Walker A E Penick W F Durham  
*J Agr Food Chem* 8(2):111-113

Mar 1960 381 J8223

Acetonitrile, Chlordane, Coumaphos, Dimethoate, DDT, Humans, Insecticide residues, Paracetophenol, Parathion, Pesticide analysis, Urine.

7963-69

## SPECIFIC DETECTION OF UREA HERBICIDE RESIDUES BY SEPARATION OF THEIR AMINES ON CELLULOSE THIN-LAYER PLATES.

H Geissbuhler D Gross  
*J Chromatography* 27(1):296-299

Mar 1967 475 J824

Amines, Analogs, Chemical analysis, Chromatography, Herbicide residues, Phenylurea compounds, Urea herbicides.

7964-69

## INSECTICIDE RESIDUES IN MILK AND DAIRY PRODUCTS.

J L Henderson  
*Residue Rev* 8:74-115, 44 REFS., 10 TABS.

1965 389.9 R314

Aldrin, Chlordane, Chromatography, Dieldrin, DDT, Endrin, Food contamination, Heptachlor, Lindane, Methoxychlor, Pesticide residues, Toxaphene.

7965-69

## EFFECT OF PESTICIDES ON CHEMICAL COMPOSITION OF SOYBEAN SEED (GLYCINE MAX (L.) MERRILL).

B J Johnson M D Jellum  
*Agron J* 61(3, MAY-JUN):379-380

Jun 1969 4 AM34P

Chemical analysis, Chromatography, Fatty acids, Fungicides, Herbicides, Insecticides, Oils, Pesticides, Proteins, Seeds, Soybeans.

Fatty acids, oil content and protein content of seeds were not affected by any of the herbicides, systematic insecticides, or fungicides which were applied to soybeans in this experiment. Seed yields also were not affected.

7966-69

## CUTICULA OF LEAVES AND THE RESIDUE PROBLEM.

H F Linskens W Heinen A L Stoffers  
*Residue Rev* 8:136-178, 222 REFS., 12 TABS., 21 FIGS.

1965 389.9 R314

Dalapon, Demeton, DDT, Dusting, Parathion, Pesticide residues, Spraying.

7967-69

## COLLABORATIVE STUDIES ON THE ANALYSIS OF PESTICIDE RESIDUES.

E J Miller I Granhall J W Cook  
*Residue Rev* 7:114-129, 5 REFS., 7 TABS., 1 FIG.

1964 389.9 R314

Benzene hexachloride, Demeton-methyl, DDT, Malathion, Mercury, Methyl demeton, Pesticide residues.

7968-69

## ONE-STEP CLEANUP OF CHLORINATED INSECTICIDE RESIDUES BY CHROMATOGRAPHY ON CARBON-CELESTE MIXTURES.

W A Moats  
*Ass Offic Anal Chem* J 47(3):587-591, 11 REFS., 2 TABS.

Jun 1964 381 AS7

Chromatography, DDT, Pesticide residues.

7969-69

## AN IMPROVED METHOD FOR THE SEPARATION AND REMOVAL OF ORGANOCHLORINE INSECTICIDES FROM THIN-LAYER PLATES.

B M Mulhern  
*J Chromatography* 34(4):556-558

07 May 1968 475 J824

Chlorinated hydrocarbons, Chromatography, Insecticide residues, Methodology.

7970-69

## THE GAS-CHROMATOGRAPHIC DETERMINATION OF ORGANOPHOSPHORUS PESTICIDES. PART V. STUDIES UNDER FIELD CONDITIONS.

J H Ruzicka J Thomson B B Wheals  
*J Chromatography* 33(3-4):430-434

19 Mar 1968 475 J824

Chromatography, Crops, Decomposition, Hydrolysis, Irradiation, Organophosphorus compounds, Pesticides.

7971-69

## STUDIES ON THE ACTION OF RESIDUES OF VAPOUROUS DDVP (DICHLORVOS) ON SOLID SURFACES. (IT)

G Saccà E Stella D Gandolfo  
*Parassitologia* 10(2-3, OCT-DEC):203-209 REF

Dec 1968 436.8 P212

Biological assay, Dichlorvos, Insecticide residues, *Musca domestica*. English abstract.

7972-69

## A RAPID AND SENSITIVE PROCEDURE FOR THE ROUTINE DETERMINATION OF ORGANO-CHLORINE PESTICIDE RESIDUES IN VEGETABLES.

D J Sissons G M Telling C D Usher  
*J Chromatography* 33(3-4):435-449 REF

19 Mar 1968 475 J824

Chlorinated hydrocarbons, Electron capture, Methodology, Pesticide residues, Quantitative analysis, Vegetables.

7973-69

## PESTICIDE RESIDUES.

S Williams  
*Anal Chem* 37(5):130R-142R, 201 REFS.

Apr 1965 381 J825A

Chlorine, Dieldrin, DDT, Heptachlor, Heptachlor epoxide, Insecticide residues, Lindane, Perthane.

## TOXICOLOGY

7974-69

## FISH BRAIN CHOLINESTERASE: ITS INHIBITION BY CARBAMATES AND AUTOMATIC ASSAY.

M B Abou-Donia D B Menzel  
*Compar Biochem Physiol* 21(1):99-108 REF

Apr 1967 444.8 C73

Biochemistry, Brain, Carbamates, Cholinesterases, Fish, Insecticides, Toxicology.

7975-69

## SUSCEPTIBILITY AND RESISTANCE OF MOSQUITO FISH TO SEVERAL INSECTICIDES.

C E Boyd D E Ferguson  
*J Sci Food Agr* 15(12):II-294-4

Dec 1964 382 S012

Dieldrin, DDT, Gambusia, Heptachlor, Mortality.

7976-69

## EFFECTS OF INSECTICIDES ON ALGAE.

A E Christie  
*Water Sewage Works* 116(5):172-176 REF

May 1969 290.8 M92

Algae, Carbaryl, DDT, Malathion, Metabolism, Radioisotopes, Toxicology.

7977-69

## RESPONSES OF CELL CULTURES TO INSECTICIDES. IV. RELATIVE TOXICITY OF SEVERAL ORGANOPHOSPHATES IN MOUSE CELL CULTURES.

J Gabliks M Bantung-Jurilla L Friedman  
*Soc Exp Biol Med Proc* 125(3):1002-1005 REF

Jul 1967 442.9 S01

Dimethoate, Disulfoton, Liver, Malathion, Mice, Organophosphorus compounds, Skin, Tissue culture, Trichlorfon.

7978-69

## THE METHOD OF CONDITIONED REFLEXES IN TOXICOLOGY AND ITS APPLICATION FOR DETERMINING THE TOXICITY OF SMALL QUANTITIES OF PESTICIDES.

L I Medved' E I Spynu Iv. S Kagan  
*Residue Rev* 6:42-74, 65 REFS., 5 FIGS.

1964 389.9 R314

Aldrin, Arsenic, Chlordane, Cholinergic system, Demeton, DDT, Heptachlor, Malathion, Manganese, Mercury, Nervous system, Parathion, Sodium cyanide.

7979-69

## EFFECTS OF VARIOUS WATER VOLUMES ON THE EFFECTIVENESS OF METHYL PARATHION-DDT IN CONTROLLING THE COTTON BOLL WEEVIL, ANTHONOMUS GRANDIS.

A D Oliver L W Sloane  
*J Econ Entomol* 57(2):292

Apr 1964 421 J822

Anthonomus grandis, Cotton, DDT, Insect control, Insecticide application, Methyl parathion, Water.

7980-69

## PYRETHRUM EFFECTS ON DOMESTIC CATS. (GE)

H Petzsch  
*Angew Parasitol* 10(1):61

Feb 1969 436.8 AN4

Cats, Insecticides, Pyrethrum, Toxicology.

## PLANT PHYSIOLOGY &amp; BIOCHEMISTRY

7981-69

## THE OCCURRENCE OF GIBBERELLIN-LIKE SUBSTANCES IN TULIP BULBS. (TULIPA SP.).

L H Aung A De Hertogh  
*Plant Cell Physiol* 8(1):201-205

Mar 1967 450 P699

Biological assay, Gibberellins, Plant biochemistry, Plant enzymes, Plant extracts, Plant growth regulator, *Tulipa*.

7982-69

## GIBBERELLIN-LIKE SUBSTANCES IN THE FRUITS OF GINKGO BILOBA L..

S N Banerjee N W Radforth

*Plant Cell Physiol* 8(1):207-209 REF

Mar 1967 450 P699

Biological assay, Chromatography, Corn, Gibberellins, *Ginkgo biloba*, Plant extracts, Plant growth regulator.

7983-69

## EFFECTS OF PICLORAM AND ETHYLENE ON LEAF MOVEMENT IN HUISACHE AND MESQUITE SEEDLINGS.

J R Baur P W Morgan

*Plant Physiol* 44(6):831-838 REF

Jun 1969 450 P692

*Acacia farnesiana*, Ethylene, Herbicides, Leaves, Picloram, Plant physiology, *Prosopis juliflora*.

Application of picloram to roots stimulated the production of ethylene in both mesquite and huisache seedlings. Herbicide levels rose in tissues before the detection of increased ethylene production. Rates of ethylene production by various parts of the plant paralleled herbicide concentrations. In both species, picloram caused loss of leaf movement and epinastic curvature of leaves and stems. Only huisache was defoliated by picloram. Rates of ethylene production increased before any leaf movement or defoliation responses were detected. Fumigation of plants with ethylene caused the same symptoms as picloram treatment.

7984-69

## GROWTH AND FRUIT DROP OF YOUNG FRUIT TREES SPRAYED WITH THE ACARIDES DEMETON-METHYL OR TETRADIFON.

J B Briggs D J Avery

*East Malling Res Sta Annu Rep* (A51):173-175

1968 103 EA7

Acaricides, Apples, Chemical control (insects), Methyl demeton, Plant injuries, Plant physiology, Pre-harvest drop, Tetradifon.

7985-69

## INHIBITION OF STRAWBERRY RUNNER PRODUCTION WITH ALAR, CYCOCEL, MALEIC HYDRAZIDE, AND TIBA.

W H Childs O E Schubert S S Miller

*W Va Acad Sci Proc* 39:194-200

1967 500 W52

Chloroethyltrimethylammonium chloride, (2-, Maleic hydrazide, Plant physiology, Plant regulators, Strawberries, Succinic acid, 2,2-dimethylhydrazine, Triiodobenzoic acid, 2,3,5,-.

7986-69

## RADIATION GLYCEMIA IN TUBER TISSUE IN SOLANUM TUBEROSUM. (POL)

J Fink

*Hodowla Roslin Aklimatyzacja Nasiennictwo*

11(1):75-90

1967 64.8 H66

Glycemia, Plant biochemistry, Plant extracts, Plant tissues, Potatoes, Radiation. English and Russian summaries.

7987-69

## RESPONSE OF TWO SPECIES OF IPOMOEA TO GIBBERELLIC ACID TREATMENT.

K Genest

*Lloydia* 30(2):164-176 REF

Jun 1967 442.8 L77

Flowering, Gibberellic acid, Greenhouses, *Ipomoea*, Plant morphology, Plant physiology, Plant reproduction.

7988-69

## A RAPID METHOD FOR THE DETERMINATION OF MANGANESE IN MANEB AND ITS FORMULATIONS.

A S Hyman

*Analyst* 94(1115):152-153

Feb 1969 382 AN1

Copper, Fungicides, Maneb, Manganese.

7989-69

## ION UPTAKE OF SWEET POTATO ROOTS INFECTED BY THE BLACK ROT FUNGUS.

H Imaseki K Akutsu I Uritani

*Plant Cell Physiol* 8(4):753-758 REF

Dec 1967 450 P699

*Ceratocystis fimbriata*, Fungus diseases (plants), Plant metabolism, Plant translocation, Sweet potatoes.

7990-69

## GROWTH-REGULATING SUBSTANCES FROM PINUS SILVESTRIS SEPARATED ON SEPHADEX LH-20.

A Klingstrom

*J Chromatography* 30(2):605-606

Oct 1967 475 J824

Biological assay, Chromatography, *Melampsora pini*, *Pinus sylvestris*, Plant biochemistry.

7991-69

## PHYSIOLOGICAL CLASSIFICATION OF PLANT GROWTH INHIBITORS. (POL)

J S Knypl

*Kosmos Ser A Biol* 16(4):413-423 REF

1967 442.8 K84

Classification, Plant biochemistry, Plant growth inhibitors, Plant physiology.

7992-69

## PYRIMIDINE DIMER FORMATION IN ULTRAVIOLET IRRADIATED TMV-RNA.

V Merriam M P Gordon

*Photochem Photobiol* 6(5):309-319 REF

May 1967 382 P56

Plant biochemistry, Pyrimidines, Ribonucleic acid, Tobacco mosaic virus, Ultraviolet rays.

7993-69

## EXPERIMENTS WITH BLACK MUSTARD (BRASSICA NIGRA) AND DISTRIBUTION OF VARYING QUANTITIES OF CALCIUM NITRATE FERTILIZER 1963 TO 1966. (DA)

A Nordestgaard

*Tidsskr Plant* 72(3):322-326

1968 11 T439

*Brassica*, Calcium nitrate, Dosage, Fertilizers, Seeds. English summary.

7994-69

## APPLICATION OF THE GAMETOCIDE FW-450 FOR PRODUCING MALE STERILITY IN RADISH (RAPHANUS SATIVUS V. RADICOLA D. C.) (POL)

T Ruebenbauer A Binek

*Hodowla Roslin Aklimatyzacja Nasiennictwo*

11(1):91-100 REF

1967 64.8 H66

Gametocides, Plant morphology, Radishes, Sterility. English and Russian summaries.

7995-69

## ROLE OF GROWTH REGULATORS IN DIFFERENTIATION PROCESSES OF MAIZE (ZEA MAYS L.) ORGANS.

Z Sladky

*Biol Plant* 11(3):208-215 REF

1969 450 B52

Biological assay, Chromatography, Corn, Plant hormones, Plant physiology.

7996-69

## PREVENTION OF PHOTOREACTIVATION OF TOBACCO MOSAIC VIRUS-RIBONUCLEIC ACID BY RECONSTITUTION.

G D Small M P Gordon

*Photochem Photobiol* 6(5):303-308 REF

May 1967 382 P56

Photochemistry, Plant biochemistry, Ribonucleic acid, Tobacco mosaic virus, Ultraviolet rays.

7997-69

## PHENOL METABOLISM IN RELATION TO DISEASE RESISTANCE OF POTATO TUBER. II. EXPONENTIAL EQUATION RELATING LEVELS OF PHENOLS OR PHENOLIC ENZYMES TO DISTANCE FROM LOCUS OF INJURY OF PLANT TISSUE.

K Tomiyama N Ishizaka

*Plant Cell Physiol* 8(1):217-220

Mar 1967 450 P699

Phenols, *Phytophthora infestans*, Plant disease resistance, Plant enzymes, Plant injuries, Plant metabolism, Potatoes, Statistical analysis.

7998-69

## PHENOL METABOLISM IN RELATION TO DISEASE RESISTANCE OF POTATO TUBER. I. ACTIVITIES OF PHENOL OXIDASE AND SOME ENZYMES RELATED TO GLYCOLYSIS AS Affected BY CHLOROGENIC ACID TREATMENT.

K Tomiyama R Sakai Y Otani T Takemori

*Plant Cell Physiol* 8(1):1-13 REF

Mar 1967 450 P699

Chlorogenic acid, Glycolysis, Phenolases, Plant disease resistance, Plant enzymes, Plant metabolism, Potatoes, Radioactive tracers.

## CHEMISTRY

7999-69

## GAS CHROMATOGRAPHIC IDENTIFICATION OF CHLORINATED INSECTICIDES BASED ON THEIR U. V. DEGRADATION.

K A Banks D D Bills

*J Chromatography* 33(3-4):450-455 REF

19 Mar 1968 475 J824

Chemistry, Chlorinated hydrocarbons, Chromatography, Degradation, Electron capture, Insecticides, Ultraviolet rays.

8000-69

## GAS CHROMATOGRAPHIC CHARACTERISTICS OF CHLORDANE. II. OBSERVED COMPOSITIONAL CHANGES OF THE PESTICIDE IN AQUEOUS AND NON-AQUEOUS ENVIRONMENTS.

A Bevene C Y Yeo

*J Chromatography* 42(1):45-52 REF

03 Jun 1969 475 J824

Chlordane, Chromatography, Pesticide analysis, Water.

8001-69

## QUANTITATIVE DETERMINATION OF PESTICIDE RESIDUES BY ELECTRON ABSORPTION CHROMATOGRAPHY: CHARACTERISTICS OF THE DETECTOR.

S J Clark

*Residue Rev* 5:32-44, 16 REFS., 2 TABS., 6 FIGS.

1964 389.9 R314

Aldrin, Anthracene, Chromatography, Dieldrin, DDT, Endrin, Heptachlor, Lindane, Methoxychlor, Pesticide residues.

8002-69

## GAS CHROMATOGRAPHY FOR THE ANALYSIS OF PESTICIDES USING AEROGRAPH ELECTRON CAPTURE DETECTOR.

K P Dimick Hal Hartmann

*Residue Rev* 4:150-172, 7 REFS., 1 TAB., 14 FIGS.

1963 389.9 R314

Chromatography, DDT, Endosulfan, Pesticide residues.

8003-69

## RECENT DEVELOPMENTS IN THE DETECTION AND DETERMINATION OF PESTICIDES AND THEIR RESIDUES BY OSCILLOGRAPHIC POLAROGRAPHY.

R J Gajan

*Residue Rev* 6:75-86, 42 REFS.

1964 389.9 R314

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8004-69

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8005-69  
GAS CHROMATOGRAPHY USING AN ELECTRON ABSORPTION DETECTOR.  
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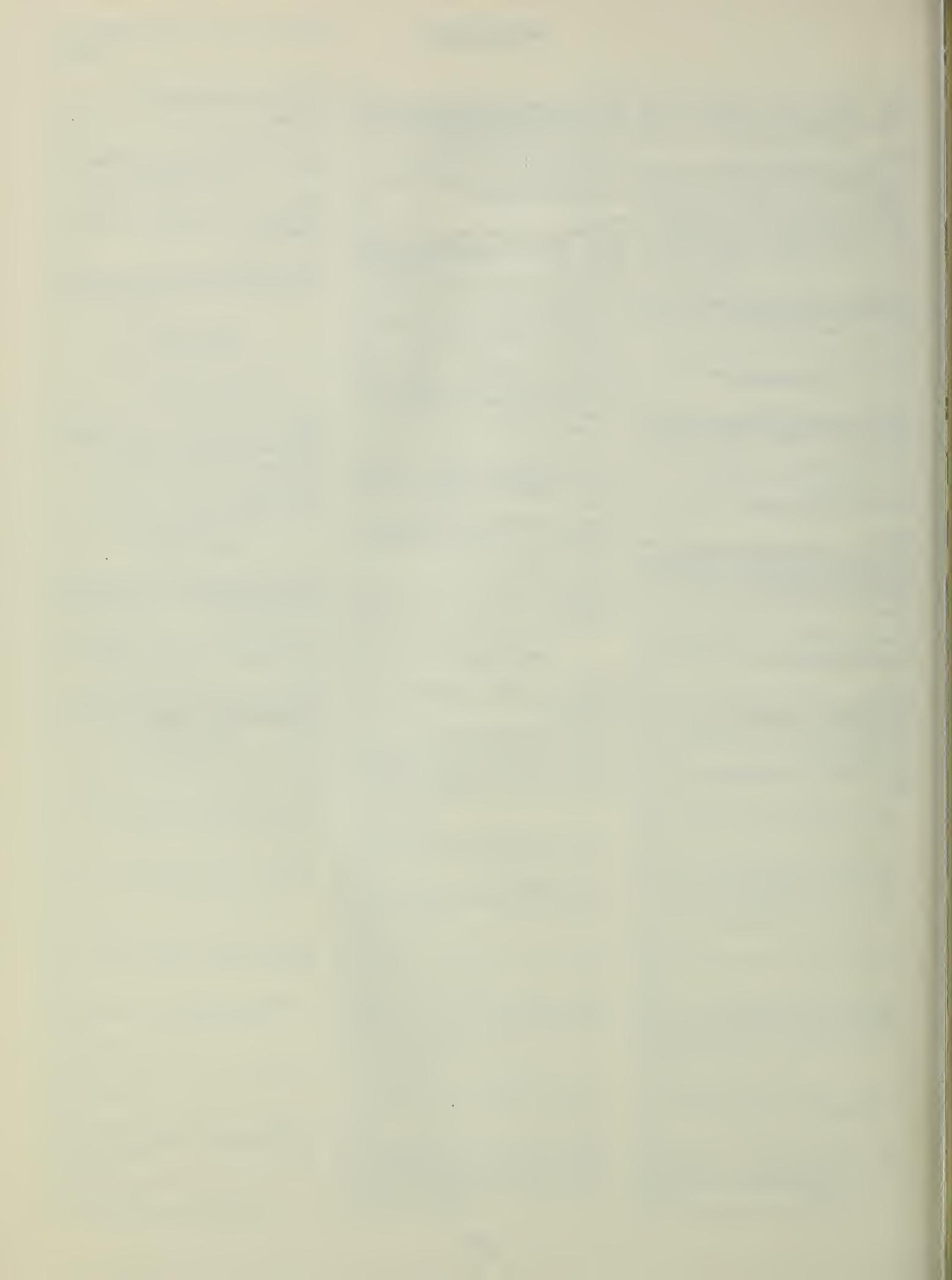
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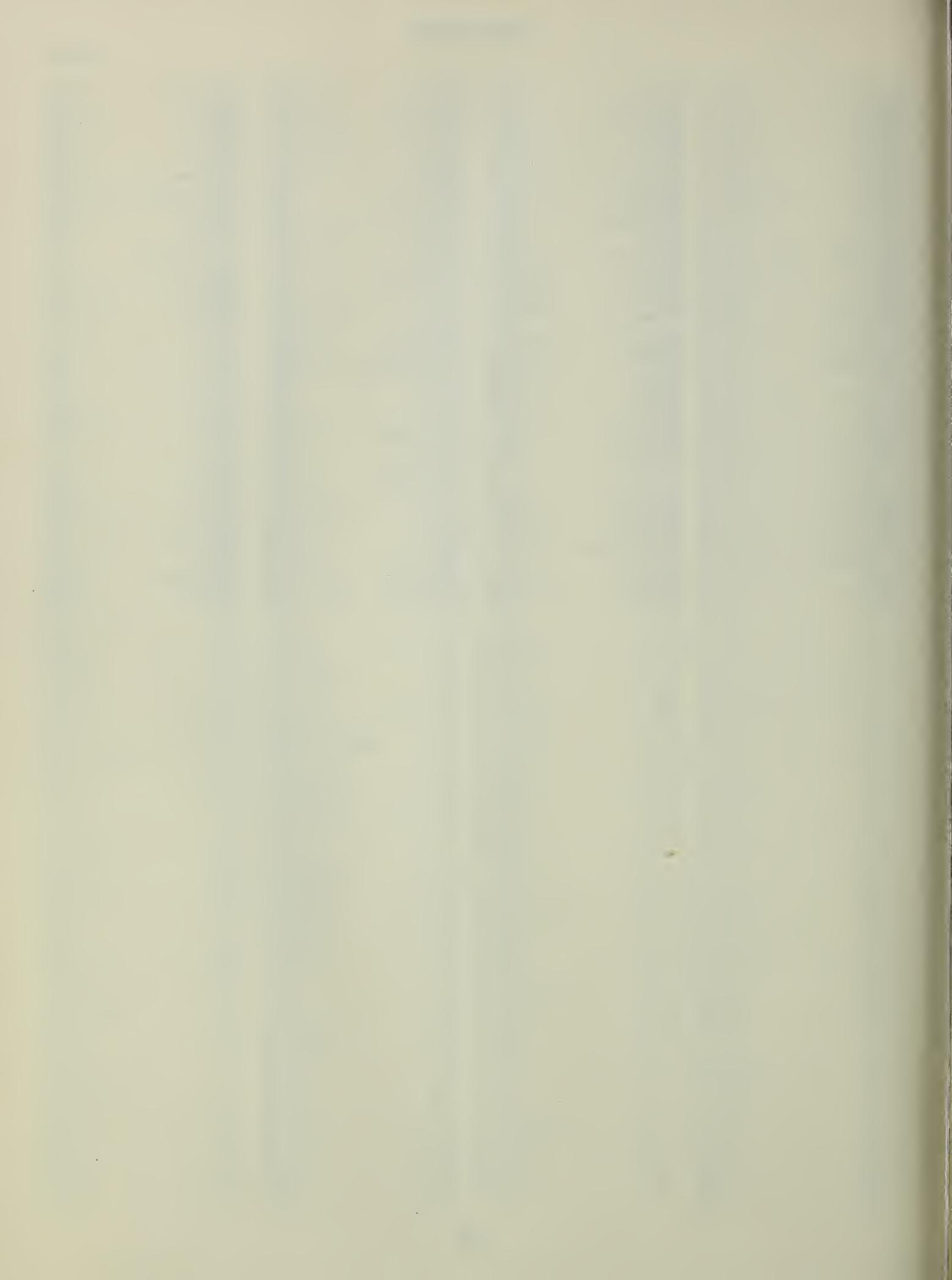
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